

THE
WHEAT
ECONOMY

BRITNELL

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THE WHEAT ECONOMY

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THE WHEAT ECONOMY

By
G. E. BRITNELL

Editor's Preface by
H. A. INNIS



THE UNIVERSITY OF TORONTO PRESS
1939

EDITOR'S PREFACE

THIS work is part of an extended project carried out by the Canadian Institute of International Affairs in co-operation with the Institute of Pacific Affairs on standards of living in Canada, and constitutes a report in the international research programme of the I.P.R. planned in 1933, which has been described in *The Japanese Canadians* by C. H. Young and H. R. Y. Reid *With a Second Part on Oriental Standards of Living* by W. A. Carrothers (Toronto, 1938), pp. vii-viii. The editor was asked by the Research Committee of the Canadian Institute of International Affairs to direct the investigation, and studies on standards of living of the chief regions have been made and published. They include the work by Dr. Carrothers, *Studies in the Economy of the Maritime Provinces* (Toronto, 1939) by Dr. S. A. Saunders, and *Labour Conditions in the Men's Clothing Industry* (Toronto, 1935) by Messrs. F. R. Scott and H. M. Cassidy. Mr. G. E. Britnell, Professor of Political Science in the University of Saskatchewan, has been engaged since 1934 in a study of standards of living in Saskatchewan and this volume presents his final conclusions. I can express here my warm appreciation of his generous co-operation throughout. I am grateful also to Professor N. A. M. MacKenzie, to Mr. Escott Reid, and to his successor Mr. J. R. Baldwin of the C.I.I.A., and to Mr. W. L. Holland of the I.P.R. for their sustained encouragement and support.

The work is concerned with a region which occupies a strategic place in the study of Canadian standards of living. Throughout the long period of prosperity from the turn of the century to 1929, labour and capital poured into the prairie regions of Western Canada for the production and export of wheat. With the depression the tide began to ebb. The drought years accentuated the problem of decline in prices.¹ There has been a retreat from land, an outward migration of labour, a sharp decline in interest payments, particularly through writing down of debts, and a decline in railway earnings and in sales of goods from Eastern Canada and British Columbia.

¹Professor J. L. McDougall estimates that from 1929 to 1936, 60 per cent of losses have been due to price changes and 40 per cent to changes in volume of production (*Canadian Journal of Economics and Political Science*, Aug., 1938, p. 430).

The region is located on the indeterminate economic height of land between the St. Lawrence and the Pacific Coast. Wheat may flow to Vancouver or to Montreal, and manufactured goods may be imported from the East or the West, depending on the varying rates of shipping and tariff levels. Emigration of labour and lower standards of living have reduced the demands for manufactured goods and have been the concern of the Canadian economy from the Atlantic to the Pacific. This volume presents a balance of accounts between income, expenditure, and fixed charges, with a description of the soil, labour, and capital equipment, and will assist in restoring wheat² to a position of proper perspective.

World trade in wheat has expanded with the rise of industrialism.³ Adaptability to transport and storage gave it a strategic place in the extension of production of foodstuffs in the plains regions to meet the demands of the densely populated industrial seaboard areas. With the support of more recent industrialism characterized by the tractor and the combine, wheat production has penetrated to the continental climatic fringes. Fluctuations⁴ have been accentuated and the soil has been exposed to rapid deterioration. Labour and capital equipment retreat with difficulty.⁵ In a letter to Edgeworth, Marshall characterized the wheat industry as follows: "Under some circumstances it is a complete industry; and then it responds slowly to price. Under others it is a mere department of general agricultural industry;

²See W. A. Mackintosh, "Western Agriculture in the Canadian Economy" (*Proceedings of the Conference on Markets for Western Farm Products*, Winnipeg, 1938, pp. 8 ff.; also pp. 153-4); K. W. Taylor, "The Commercial Policy of Canada" (*Canadian Marketing Problems* ed. H. R. Kemp, Toronto, 1939).

³See F. W. Burton, "Wheat in Canadian History" (*Canadian Journal of Economics and Political Science*, May, 1937, pp. 210-17).

⁴See Isaiah Bowman, *The Pioneer Fringe* (New York, 1931).

⁵The Regina Board of Trade claimed that "if the great open plain . . . in the centre of which Regina stands cannot make a place for itself in the world's economy by the production of hard wheat it is doubtful if it has any place in the world's economy" (*Proceedings of the Conference on Markets for Western Farm Products*, Winnipeg, 1938, p. 163). Mr. J. H. Wesson stated that when the farmer has produced "a lot of wheat and sells it lower than the cost of production, he feverishly proceeds to try to produce more to offset his losses" (*ibid.*, p. 77). See also the Hon. J. G. Taggart, "The Possibilities of Shifting from Wheat Growing to Other Types of Farming in Western Canada and the Implications of Such Changes" (*ibid.*, pp. 201 ff.).

and then it responds almost instantaneously."⁶ With the second alternative, governments concerned with programmes of self-sufficiency have been conspicuously successful in increasing the production of wheat.⁷ Industrialism based on new sources of power and scientific advance has not only meant a decline in international trade in wheat through production in new regions but also through changes in nutritional habits with less dependence on carbohydrates. More bulky food products characteristic of changes leading to a more balanced diet involved higher transport charges and consequently more local production.⁸ These developments restrict the market for wheat produced in regions where it is a "complete industry", and lower prices necessitate governmental support in those regions. A community which emerged from a background of rapid growth of international industrialism has been faced with the effects of rapid emergence of national industrialism. It has been concerned with a commodity essential to international industrialism and a commodity which has responded quickly to national industrialism. The population of Western Canada dependent on wheat production has been compelled to submit to the effects of fundamental cultural readjustments in Western civilization as well as to the effects of variations in seasons. The wheat policies of European governments largely determine the policies of governments in other wheat-producing regions.⁹ The response to price in Western Canada has varied with the capital resources, background, and training of settlers, and geographic features such as climate and soil, but the wide areas affected by drought preclude the extensive development of mixed farming. The extreme difficulties in formulating an effective government policy under these conditions without previous experience have been outlined in this volume and have been evident in problems of relief, farm credit,¹⁰ political revolution, and political stagnation.

⁶A. C. Pigou (ed.), *Memorials of Alfred Marshall* (London, 1925), p. 440.

⁷See *Proceedings of the Conference on Markets for Western Farm Products*, pp. 48 ff.

⁸See C. J. Friedrich, *Alfred Weber's Theory of the Location of Industries* (Chicago, 1929).

⁹*State and Economic Life* (Paris, 1934), pp. 252-4.]

¹⁰W. T. Easterbrook, *Farm Credit in Canada* (Toronto, 1938).

If we accept the conclusion¹¹ that population flows "from an area of low standard of living to an area of high standard of living" and that rate of flow is "a gradient of standards of living", we can regard the migration from the prairie regions eastward¹² as an indication of a sharp decline from a high to a low standard of living. The significant problem is not the standard of living but the rate of its change. Rapid change in the standard of living has disastrous effects on population and has involved governmental measures of an emergency character. Professor Hope has characterized one measure, a guaranteed price of wheat, as "about the most unfair kind of bonus you can possibly give Western agriculture because it gives a definite bonus to the man with a big crop, and nothing to the man with a crop failure. There is no bonus on coarse grain."¹³ Suggested policies vary from a reduction in costs through such expedients as lowering the tariff¹⁴ and the cost of marketing both wheat and manufactured products¹⁵ and thereby possibly increasing production, enhancement of prices by monetary policy and thus probably maintaining the rigidity of such fixed charges as debt and increasing production, stimulating consumption by reducing the spread between the price of wheat and the price of

¹¹Carl Alsberg, "Standards of Living as a Factor in International Relations" (*International Affairs*, Nov., Dec., 1937, pp. 920-1); also "The Food Supply in the Migration Process" (*Limits of Land Settlement*, Paris, 1937).

¹²W. B. Hurd, "Population Movements in Canada, 1921-1931, and Their Implications" (*Papers and Proceedings of the Sixth Annual Meeting of the Canadian Political Science Association*, May, 1934, pp. 220 ff.); S. W. Alty, "The Influence of Climatic and Other Geographic Factors upon the Growth and Distribution of Population in Saskatchewan" (*Geography*, March, 1939, pp. 10 ff.).

¹³*Proceedings of the Conference on Markets for Western Farm Products*, p. 240; see also R. W. Gardner, "Wheat Production Costs" (*Canadian Chartered Accountant*, March, 1939, pp. 165 ff.).

¹⁴See A. R. Upgren, "Monetary Policy in Relation to Farm Income" (*ibid.*, pp. 131 ff.). Premier Bracken claims that tariff and monetary policies imposed a burden of \$47,000,000 annually on Western Canada (*ibid.*, p. 239). See F. J. Westcott, "An Approach to the Problem of Tariff Burdens on Western Canada" (*Canadian Journal of Economics and Political Science*, May, 1938, pp. 209 ff.).

¹⁵See J. E. Lattimer, "Recent Developments in Co-operative Marketing" (*Canadian Marketing Problems* ed. H. R. Kemp, pp. 112-25). While Professor Lattimer argues that increased co-operation has been a result of high costs of marketing, in so far as co-operation may involve difficulties of bankruptcy it may contribute to rigid costs of marketing.

bread¹⁶ especially in Canada, reducing production and exports by fostering alternative products¹⁷ such as beef, pork, mutton, and butter, and as Professor Lattimer advocates, cereals for export to other provinces more favourably situated for the raising of livestock and the manufacture of dairy products, maintaining labour and capital equipment in the drought areas¹⁸ to take advantage of favourable years by such devices as relief and crop insurance, and withdrawing population from the most acute areas. These policies cannot be regarded as a solution to the problems of marked fluctuations in price or in volume. They may even accentuate the fluctuations, and they may become contradictory as more favourable conditions for wheat production limit the possibilities of production of alternative commodities. -

The complexity of the problem involves difficulties not only for Western Canada but also for British Columbia and Eastern Canada. Widely fluctuating income in Western Canada involves periodic bombardments on Eastern Canada and British Columbia.¹⁹ Low prices of wheat lead to increased production of livestock and dairy products in Western Canada and more direct competition with other regions. Farming technique in the St. Lawrence is necessarily flexible. Intense specialization is more difficult to achieve, and competition in export markets is handicapped. Limited shipments of high grade products to the export markets involve flooding the domestic market with lower grade products and in turn reducing the possibilities of domestic consumption.

The effects of sharp fluctuations are particularly severe with the closed system built up under the Canadian tariff²⁰ and American immigration restrictions. Migration from Canada²¹ to the United

¹⁶For a discussion of the control of flour mills over the baking industry, see *Investigation into an Alleged Combine in the Bread-Baking Industry in Canada* (Ottawa, 1931), pp. 38 ff.

¹⁷A. M. Shaw, "The Problem of Export Markets for Canadian Cattle"; L. W. Pearsall, "The Problem of Export Markets for Canadian Hogs"; G. W. Tovell, "Markets for Creamery Butter" (*Proceedings of the Conference on Markets for Western Farm Products*, pp. 265 ff.).

¹⁸See W. J. Waines, "Problems of the Drought Area in Western Canada" (*Essays in Political Economy in Honour of E. J. Urwick*, Toronto, 1938, pp. 205 ff.).

¹⁹See J. A. Ruddick et al., *The Dairy Industry in Canada* (Toronto, 1937).

²⁰See H. A. Logan, "Labour Costs and Labour Standards" (*Labour in Canadian-American Relations*, Toronto, 1937, chap. x).

²¹See H. R. Kemp, "Notes on the Population Problem" (*Commerce Journal*, March, 1939, pp. 31 ff.).

States and from Europe to Canada was effectively checked by 1930. The other regions have been affected by variations in immigration from Western Canada as well as by variations in trade. Natural increase in population in the St. Lawrence region plus immigration from Western Canada, with no outlet to the United States, has enhanced the difficulties of unemployment, relief, lower standards of living, and increasing stress on self-sufficient agriculture.²² With difficulties in Western Canada, the Maritimes have been affected by a decline in demand for railway equipment, coal, and manufactured products. With a population drained by emigration²³ over a long period to the interior of the continent, with a fishing industry compelled to meet tariffs and competition from other countries in foreign markets, with a lumber industry faced with competition from British Columbia through the Panama Canal, and with agriculture, restricted in its local markets, forced to meet competition from the St. Lawrence and compelled to bear with other industries losses incidental to a closed system, they have continued to face a low standard of living. These repercussions of disturbances in Western Canada on other regions have increased the difficulties of unified approach to a common problem. The lowering of prices of raw material in the depression contributed to the increasing importance of the gold mining and the pulp and paper industries in relation to the American market, and of industries such as agricultural implements and motor cars in relation to other markets. The latter industries sustain possible losses in the markets of Western Canada by profits in foreign markets. Access to the American market²⁴ may soften the severity of repercussions but the task of government is difficult.²⁵

The persistent difficulty of adjusting institutions combining feudalism and modern capitalism which characterize the federal

²²See E. C. Hughes, "Industry and the Rural System in Quebec" (*Canadian Journal of Economics and Political Science*, Aug., 1938, pp. 341 ff.).

²³See *The Maritime Provinces since Confederation* (Ottawa, 1927), chap. ii.

²⁴It has been estimated that the United States will require fifteen to twenty million additional acres of land to meet the demands of increasing population by 1950. See O. E. Baker, "The Agricultural Prospect" (*Our Natural Resources and their Conservation* ed. A. E. Parkins and J. R. Whitaker, New York, 1936, chap. ix).

²⁵F. W. Burton, "Staple Production and Canada's External Relations" (*Essays in Political Economy in Honour of E. J. Urwick*).

governments²⁶ of the North American continent in placing, according to feudal principles, control over natural resources and land in the hands of the provinces and the states, and, according to capitalistic demands, control of interstate and foreign trade in the hands of the federal government, involves a drain on economic energies and inability to direct them effectively. The British North America Act was designed to foster trade and commerce and to enable the provinces to defray their expenditures by subsidies and direct taxes. The advance of technology which created paper from spruce and balsam and converted the vast waste areas of the Precambrian formation into a region with paper plants, power sites, and mines producing chiefly for the American market accentuated the feudalistic character of federalism. Construction of railways and canals with federal support for the development of trade and commerce contributed to the exploitation of the extensive northern areas belonging to the provinces of Ontario and Quebec and to the rapid development of the prairie resources belonging to the federal government. The consequent debt of the federal government and the problems of wheat in the prairie regions in relation to European markets are in sharp contrast with the advantages of the provinces on the St. Lawrence. A federal tariff structure linked to the transportation system provides further assistance to the industrial regions of the St. Lawrence. With rigid railway rates, and relatively rigid prices of manufactured products, and sharp decline in income, the pressure on debt revision in the prairie regions has been direct and pronounced. Taxes in the form of debt and debt reduction have fallen heavily on the debtor and on the creditor. The tariff possibly increases the burden of Western Canada and thereby the burden of the federal government through relief, assumption of provincial debt, and lower railway earnings, and penalizes those concerned with farm credit. These inherent constitutional inconsistencies contribute to the difficulties of escape from a lower standard of living. They are fostered by confusion of economic thought in Western Canada which emphasizes freedom of trade because of the importance of wheat on the one hand, and statements that "fair price is the cost of production", and the just price is that which enables people "to buy the goods and services

²⁶See H. A. Innis, "Significant Factors in Canadian Economic Development" (*Canadian Historical Review*, Dec., 1937, pp. 374 ff.); also "Notes on Problems of Adjustment in Canada" (*Journal of Political Economy*, Dec., 1935, pp. 800 ff.).

they need to carry on their labour in their service", on the other hand. In Eastern Canada feudalism and physiocratic ideologies stress the importance of return to the land and the spiritual advantages of rural life and a lower standard of living. Professor Britnell has perhaps made his most important contribution in hastening a decline in the rigidities of these phases of agricultural fundamentalism²⁷ by compelling a consideration of the problems of the wheat economy.

The Canadian federal structure is wrenched between the influence of British policies and their effect on wheat, and of American policies and their effect on minerals and newsprint and on the rigidity of such important costs of wheat production as railway rates and interest charges. The policy of damping down of speculative activity restricts the possibilities of the lifting of wheat prices and increases reliance on government intervention. Disparities between the policies of Great Britain and the United States have been felt most acutely in the region of widely fluctuating income and the problems of standards of living have necessitated dependence on arbitrary transfers between regions in the Canadian federal structure.

H. A. INNIS

The University of Toronto,
April, 1939.

²⁷See J. S. Davis, "Agricultural Fundamentalism" (*Economics, Sociology and the Modern World* ed. N. E. Himes, Cambridge, 1935, pp. 3-22); also "The Spectre of Dearth of Food: History's Answer to Sir William Crookes" (*Facts and Factors in Economic History*, Cambridge, 1932, pp. 733 ff.).

PREFACE

THE agricultural settlement of Saskatchewan, made possible by transcontinental railways and branch lines, has taken place in the twentieth century. Soil, topography, and a semi-arid climate favoured specialization in wheat production. These factors, together with a favourable conjuncture of costs and prices and the introduction and steady improvement of dry farming techniques from the western United States, large-scale agricultural machinery, and early maturing, drought-resistant varieties of wheat, made for rapid expansion of settlement and of wheat acreage. Urban development served and reflected the needs of an agricultural community producing for export markets.

The income of the province of Saskatchewan depends fundamentally on the volume, price, and to a lesser degree, the grade of its export staple, wheat, and is extremely variable. Yet from the opening of the century down to 1929 there can have been few parts of the civilized world in which such tremendous advances from rude, pioneer levels were made possible by the application of constantly improving techniques to the rapid exploitation of virgin natural resources. Provincial and municipal institutions provided educational and medical facilities, roads, telephones, and numerous social services, while voluntary associations and group institutions made important contributions to a rising standard of living. By 1929 a measure of prosperity had been attained by the average, established farmer on the better soil types of the region.

Standards of living in the wheat economy of Saskatchewan have been depressed by overhead costs, recurring cycles of drought, specialization in wheat, and dependence on prices determined in export markets. Since 1929 the effects of drought and depression have been reflected in the exhaustion of reserves, a mounting burden of private and governmental indebtedness, relief advances, capital disinvestment (as revealed in the steady depreciation of farm machinery, buildings and equipment, schools, highways, and telephone systems), abandoned farms, a sharp reduction in the standard of living of the entire agricultural population, and all the other marks of a chronically depressed economic area.

Over the last decade, drought and depression have indicated that throughout the region emphasis has shifted from problems of exploitation to problems of conservation and that, accordingly,

the economy must be re-established on a basis which will reduce the waste of human and economic resources in the future. An attempt has been made in this study to indicate both the limits of individual initiative and the possibilities of constructive governmental action.

There is no simple solution to the problems presented by violent fluctuations in net income in the prairie wheat economy. Restoration of living standards to the moderate levels of the late twenties would require an unusual succession of good crops together with a favourable relationship of prices and costs. Even assuming a return to "normal" wheat crops and incomes, permitting a measure of effective economic and social rehabilitation, it appears likely that the new levels will be lower than those which obtained in the region prior to the depression. At the same time, continued dependence on wheat, combined with the limitations imposed by geography and climate on any attempts to achieve a larger measure of self-sufficiency in farm family living over most of the area, indicates that the economy will continue to be subject to marked fluctuations in standards of living.

The author is particularly indebted to the officials of the Dominion Bureau of Statistics; and of the Departments of Agriculture, Finance, and Labour of the Dominion Government; to the officials of every Department of the Government of Saskatchewan; to Dr. William Allen, and to Professor E. C. Hope, his successor in the Chair of Farm Management in the University of Saskatchewan; and to Dr. John Mitchell, Professor of Soils in the same university. Thanks are due also to the Stovel Company of Winnipeg, for their courtesy in making available the plates of maps and illustrations; and to Miss Alison Ewart, Head of the Editorial Department of the University of Toronto Press, for seeing the volume through the press. Professor V. W. Bladen of the Department of Political Economy, University of Toronto, contributed valuable criticisms of certain sections of the work. Finally, the author wishes to express his sincere appreciation of the generous encouragement which he has received at all times from Dr. H. A. Innis, Head of the Department of Political Economy in the University of Toronto, under whose guidance the study was undertaken.

G. E. BRITNELL

The University of Saskatchewan,
March 20, 1939.

CONTENTS

I. The Geographical Background.....	1
II. Railways and Population.....	11
III. The Distributing Structure.....	23
IV. The Wheat Economy.....	34
V. Income and Expenditure.....	69
VI. Provincial and Municipal Institutions.....	100
VII. Standards of Living.....	150
VIII. Rehabilitation.....	202
Appendix.....	242
Index.....	255

FIGURES

1. Geological sketch map of Saskatchewan.....	2
2. Sketch map of physiography and drainage.....	3
3. Sketch map of main soil zones of Saskatchewan.....	7
4. Type-of-farming areas in Prairie Provinces, 1935.....	49

PLATES

1. Brown, Dark Brown, and Black soil zones.....	<i>Facing page</i>	4
2. Gray soil zone.....	<i>Facing page</i>	6
3. Agriculture in south-western Saskatchewan.....	<i>Facing page</i>	58

CHAPTER I

THE GEOGRAPHICAL BACKGROUND¹

The focus of the economic circumstances of the settlement of the Canadian Prairies is and has been wheat. . . . For the whole of Canada, wheat, in terms of population, is almost three times as important as it is in the exporting countries of Argentine and Australia, and six times as important as in the United States. It is only to be expected that it should be of relatively much greater importance than in such importing countries as France, Italy, and Spain. . . . Wheat is the export staple of the Canadian Prairies. Prosperity and stimulus came through wheat, as did depression and discouragement.—W. A. MACKINTOSH

The province of Saskatchewan, with an area of some 251,700 square miles, lies in the north-central portion of the Great Continental Plain of North America. It is located between the 49th and the 60th degrees of latitude but only the southern half, roughly between the 49th and 54th degrees, is settled and suited to agricultural purposes. North of the 54th parallel the shorter growing season and the Precambrian Shield (see figure 1) with its numerous rivers, lakes, and swamps, its coniferous forests and scanty soil, discourage agricultural settlement.

The area suited to settlement consists of a vast treeless plain, a generous strip of park country bordering the plain on the east and north, and a small part of the wooded belt north of the park belt. The elevation of the plains area is from 2,000 to 3,000 feet and of the park and wooded areas, from 1,500 to 2,000. In the south-western part of the province two high plateaux, the Cypress Hills and Wood Mountain, have elevations of from 3,000 to 5,000 feet and in the eastern section of the settled area Moose Mountain and the Touchwood Hills, elevations of from 2,500 to 3,000 feet.

The area within the province slopes to the east and north (see figure 11). The western, northern, and central sections of the settled area are drained by the two branches of the Saskatchewan

¹See *A Submission by the Government of Saskatchewan to the Royal Commission on Dominion-Provincial Relations* (Canada, 1937) (Regina, 1937), pp. 127 ff. For a more detailed account of geography and climate, see C. E. Koeppel, *The Canadian Climate* (Bloomington, 1931), chaps. i-iv and vi; W. A. Mackintosh, *Prairie Settlement: The Geographical Setting* (Toronto, 1934), *passim*; and W. B. Hurd and T. W. Grindley, *Agriculture, Climate and Population of the Prairie Provinces of Canada: A Statistical Atlas* (Ottawa, 1931), pp. 4-24.

River and their tributaries. Most of the eastern part is drained by the Assiniboine through its tributaries, the Qu'Appelle and Souris Rivers. In the south-west, Frenchman River drains into the Missouri River in the United States. Some large areas between rivers drain into shallow lakes which have no outlets. The largest are Big Manitou, Jack Fish, Johnstone, Last Mountain, and the Quill Lakes. Over a large part of the province in years of normal

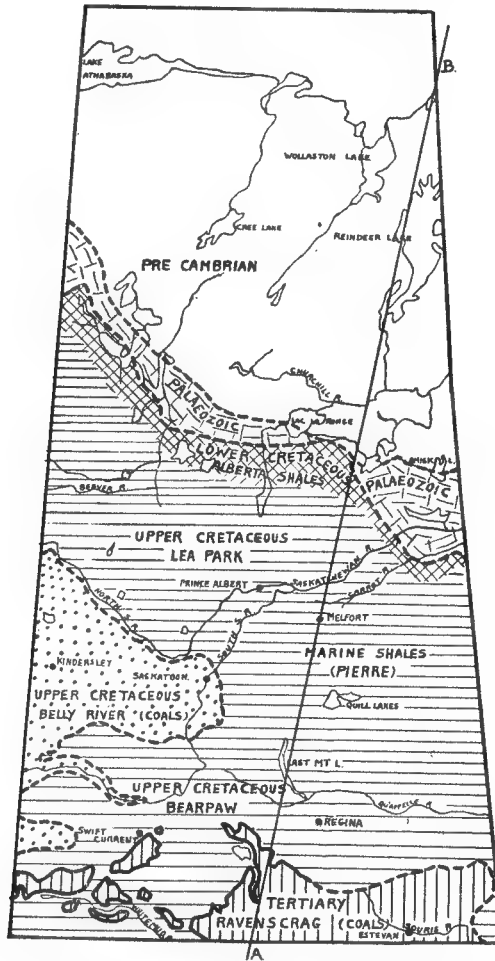
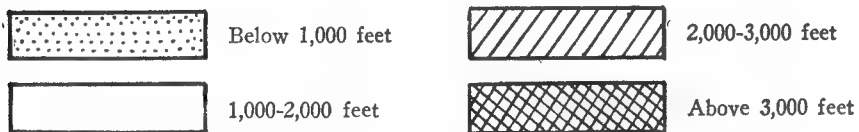


FIGURE I.—Geological sketch map of Saskatchewan.



FIGURE II.—Sketch map of physiography and drainage.

ELEVATIONS ABOVE SEA LEVEL



precipitation numerous small lakes and sloughs, when not alkaline, provide water supplies for stock in the spring and early summer, and after drying up in late summer, furnish an excellent growth of native grass for hay. Streams and creeks are rare on the prairie plains.

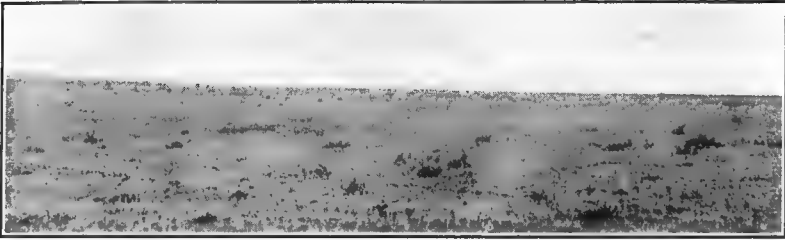
The climate of Saskatchewan is characterized by limited precipitation, long cold winters, rather short hot summers, and, during the growing season, by high total hours of sunshine resulting from the long days of northern latitudes and generally clear skies. The temperature of an average summer day varies from 50 degrees at sunrise to 75 degrees in the afternoon and it is not uncommon for the thermometer to register 100 degrees or higher during a heat wave in July or August. On an average mid-winter day the temperature will vary from 10 degrees below zero at dawn to 10 above at noon, though on exceptionally mild winter days it may rise 50 or 60 degrees above zero in south-west Saskatchewan and 45 to 50 in the south-east. During intense cold waves records of 50 to 60 degrees below zero have been established within the settled region of the province.

An average yearly precipitation of from 11 to 20 inches places the province definitely within the sub-humid and semi-arid zones. The bulk of the precipitation occurs as rain in summer, the maximum proportion coming in June and July in the grain-growing sections. Total precipitation varies from 11 to 15 inches at different stations on the plains and from 14 to 19 inches at park belt stations. In the wooded areas records are incomplete. The great variability of summer rainfall and the frequent occurrence of intense heat during dry spells constitute the chief hazards in cereal production.

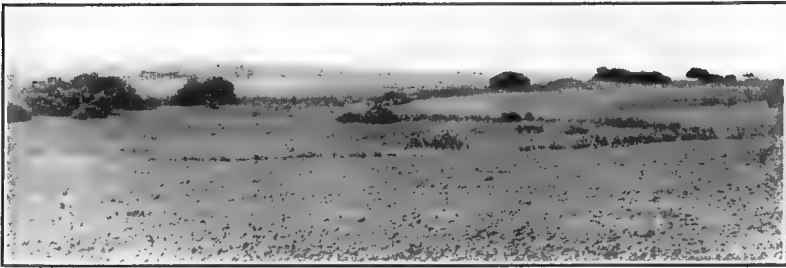
The average frost-free period varies from about 90 days in the north-western crop districts to 135 in the south-western. The high average day temperature, low rainfall, and long days hasten the development of crops so that early maturing varieties of cereals can be grown with relative safety in most of the settled sections of the province. Chinook winds, or warm, dry breezes, from the west occur frequently in the southern and more especially the south-western parts of the province in January and February, melting the light snow cover and making the grass available for grazing. Range activities are practically limited to these areas.

The soils of Saskatchewan reflect the influence of climate.

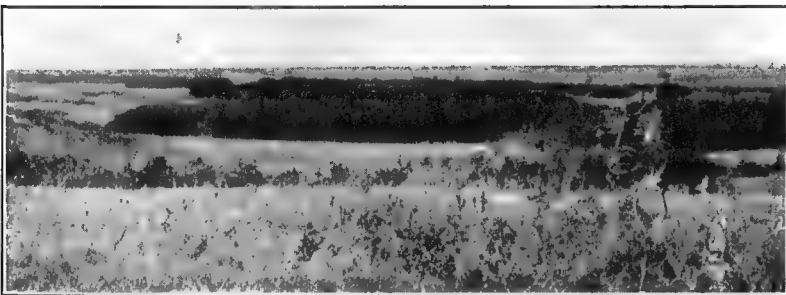
PLATE I



The semi-arid climate of the Brown soil zone is indicated by the native vegetation of short grasses and sage-brush.



In the Dark Brown soil zone small clumps of willows and poplar trees are often found around the borders of sloughs.



Scattered "bluffs" of poplars, willows, and various shrubs, and tall grasses on the open land, is the vegetation typical of the Black soil zone. This area is commonly spoken of as the park belt.

They are predominantly glacial in origin since in glacial times the region was covered by the Keewatin ice sheet which in moving southward carried with it a variety of surface rocks.² These remains are rich in the mineral elements necessary for plant growth. Their extreme variability is evident in the heterogeneous nature of the soils, and physical modifications of the glacial drift are responsible for many soil features. Most of the gravelly and sandy soils have resulted from glacial outwash deposits, and many of the silt and clay soils can be traced to water transportation of finer material to lakes which later dried up.³

The block of about 100,000 square miles of settled area in the southern half of the province can be divided into three distinct soil and climatic zones: (1) the short grass prairie plains characterized by an absence of trees or bushes except in moist, sheltered locations such as river valleys or coulées or small areas with a definitely moister climate such as the Cypress Hills; (2) the park belt with its taller grasses and scattered poplar, aspen (and in lower places, willow) clumps or "bluffs"; and (3) the wooded zone with a tree growth mainly of poplar, spruce, tamarack, and jack-pine.

The plains area is divided almost evenly between the Brown Prairie plains and the Transition or Dark Brown Prairie plains⁴ (see figure III and table 1). The Brown Prairie zone, which occupies the south-western portion of the province, has soils light brown in colour with a relatively low organic content and a thin cover of natural grasses. Much of the land is non-arable owing to the wide distribution of the "clay-spot" soils, eroded lands, and drift sands. Rainfall in this soil zone is both light and highly variable; crop yields show great fluctuations from year to year but are fair on the average on the better soil types. Ranching

²See A. H. Joel, J. Mitchell, F. H. Edmunds, and H. W. Larson, *Soil Survey of Southwestern Saskatchewan from the Third Meridian on the East to the Alberta Boundary on the West, and from the Top of Township 16 on the North to the International Boundary on the South: Report no. 9* (Saskatoon, University of Saskatchewan, College of Agriculture, 1931), p. 69. See also A. P. Coleman and W. A. Parks, *Elementary Geology with Special Reference to Canada* (Toronto, 1930).

³Joel et al., *Soil Survey of Southwestern Saskatchewan*, p. 70.

⁴See A. H. Joel, J. Mitchell, F. H. Edmunds, and H. C. Moss, *Reconnaissance Soil Survey of Saskatchewan from the International Boundary on the South to the Top of Township 48 on the North: Report no. 10* (Saskatoon, University of Saskatchewan, College of Agriculture, 1936), p. 11.

activities prevail on a large part of the poorer lands. Bordering the Brown Prairie plains on the north and east and almost equal in area lies the Transition or Dark Brown Prairie plains soil zone of which the soils are darker in colour and carry a somewhat heavier cover of short grass. This soil belt is devoted predominantly to wheat production since the good soils of the zone, particularly the heavy-textured soils, give high yields of high quality wheat.

TABLE I
AREA OF SOIL ZONES OF THE SETTLED PORTION OF SASKATCHEWAN
MAPPED BY SASKATCHEWAN GOVERNMENT SURVEY*

Zone	Area in square miles	Percentage of surveyed area
Brown Prairie plains	30,725	32.6
Transition or Dark Brown Prairie plains	29,240	31.1
Shallow Dark park	22,550	23.9
Deep Dark park	2,915	3.1
Wooded Gray soils (incompletely mapped)	8,750	9.3
TOTAL	94,180	100.0

*J. Mitchell and D. L. MacFarlane, "Remarks on the Utilization of the Soil Survey and Some Data regarding the Soils of Saskatchewan" (*Scientific Agriculture*, vol. XV, Jan., 1935, p. 263).

Bordering the Dark Brown Prairie plains on the north and east is the park soil zone which is divided into two parts, the Shallow Dark and the Deep Dark. The Deep Dark soils, reflecting a more humid climate, are darker in colour, higher in organic-matter content, and support a more luxuriant natural growth. In the park belt, wheat is grown successfully, but there is a distinct tendency toward lower quality as measured by protein content. Coarse grains do exceptionally well and forage crops are generally successful, especially on the deeper, black park soils.

The soils of the northern fringe of settlement are of the wooded, gray types. They have been under tree cover for a long time and consequently have lost some of the nutritive elements necessary for cereals. These soils, generally low in nitrogen and phosphorus, are not well adapted to wheat production.⁵

⁵*Ibid.*, p. 13. See also F. A. Wyatt, "The Necessity for Growing Legumes on Gray Wooded Soils" (*Scientific Agriculture*, vol. XIV, Feb., 1934, pp. 327-35), and "Fertilizers for the Black and Gray Soils of Central Alberta" (*ibid.*, vol. XVI, Jan., 1936, pp. 238-40).

PLATE II



Heavy stands of spruce, poplars, and other trees occur on the upland soils of the Gray soil zone.



Marshy lakes surrounded by dense woodland are frequently found in the Gray soil zone and in more moist sections of the Black soil zone.

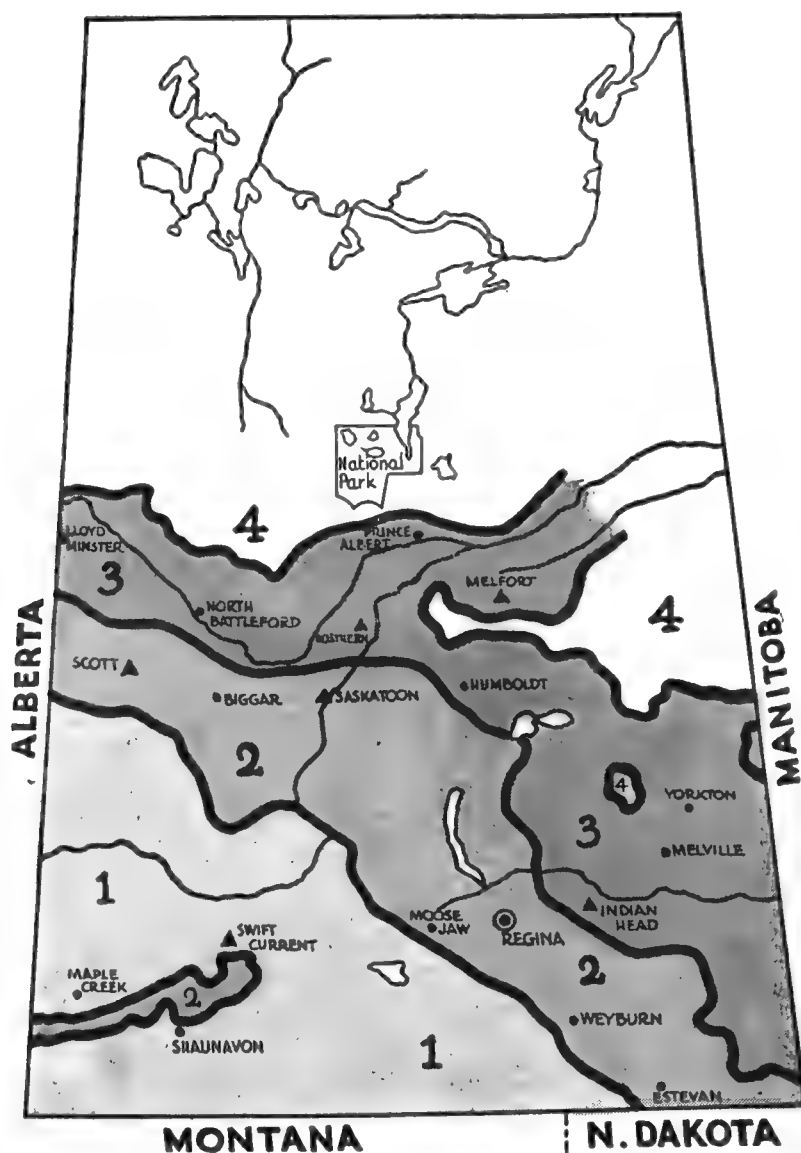


FIGURE III.—Sketch map of main soil zones of Saskatchewan.

LEGEND

1. Brown Soils—Short grass prairie.
2. Dark Brown Soils—Intermediate prairie.
3. Black Soils—Tall grass "Park" region.
4. Gray Soils—Wooded region.

The Saskatchewan Soil Survey after fifteen years' work has covered practically the whole of the settled area of the province. An analysis of results has been made with a view to determining the suitability of soils to wheat production. Each soil type has been placed in one of six general productivity groups (table II)

TABLE II
SUITABILITY OF SASKATCHEWAN SOILS FOR WHEAT PRODUCTION*

Group	Description	Percentage of settled area of Saskatchewan	Area in square miles
1	Superior.....	7.1	6,680
2	Very good.....	5.9	5,560
3	Moderately good.....	16.9	15,910
4	Fair.....	25.4	23,920
5	Poor.....	18.5	17,410
6	Very poor.....	26.2	24,630
TOTAL.....		100.0	94,110

*A. H. Joel *et al.*, *Reconnaissance Soil Survey of Saskatchewan: Report no. 10* (Saskatoon, University of Saskatchewan, College of Agriculture, 1936), p. 75.

on the basis of estimated long-time wheat yielding ability with wheat selling at normal prices. Thirty per cent of Saskatchewan soils may be considered either first class or moderately good wheat lands and a further 25 per cent as fair for purposes of wheat production. Forty-five per cent of the settled area is poor or very poor wheat land, incapable, over a period of years and with normal prices for wheat, of yielding sufficient to cover costs of production. A relatively small part is under cultivation and provides the basis of the most acute farm problems of the province. From the data given in tables I and II only 13 per cent of the Brown plains soils were classified as superior to moderately good wheat land (groups 1-3) while an area five times as large, or almost two-thirds of the total area, fell into the poor and very poor groups (5 and 6) which must be regarded as submarginal. The Transition zone or Dark Brown plains soil had 15 per cent of its area in the superior group, a further 15 per cent, good (groups 2 and 3), and one-third of its area, submarginal (groups 5 and 6). Two-thirds of the much smaller area of the Deep park soils were classified as superior and

very good and a little over 10 per cent as submarginal. Of the wooded soils 20 per cent was superior to moderately good and more than half was submarginal.⁶

The wheat productivity of Saskatchewan soils, on account of the semi-arid climate, depends more on the quality and texture of the soil than on any other single factor. Since the organic composition of soils corresponds closely to vegetative cover which is in turn related to climate, a high percentage of the poor soils is in the area most subject to drought. In terms of texture 20 per cent of the soils are of heavy clay or moderately heavy silt and clay loam texture and 45 per cent are medium textured soils or loams. The light loams and sandy soils account for 15 per cent to which must be added definitely non-arable lands such as extremely stony and rough lands, sands, gravel, alkali, etc., covering the remaining 20 per cent of the settled area of the province.

Topography is also important in wheat production as rolling land increases costs of operation, does not permit the most effective utilization of moisture, and is subject to water erosion. Three-quarters of the agricultural area is undulating to gently rolling and the remaining one-quarter ranges from hilly to steep. A large part of the roughest land is found in the south-west associated with inferior soils and a semi-arid climate.⁷

The agriculture of the province is necessarily differentiated on the basis of soil and climate. The proportion of land under cultivation varies largely with the fertility of the soil. In one rural municipality near Regina, representative of the heavy clay type of the Dark Brown Prairie plains, 97 per cent of the land was under cultivation in 1926;⁸ on loam soils of the Brown and Dark Brown plains zone the proportion varies from 50 to 75 per cent; on well-settled wooded soils it is less than 50 per cent; while on the ranching frontier of the south-west and across the northern pioneer fringe it is in each case considerably less than 25 per cent.⁹

⁶See D. L. MacFarlane, "Agricultural Land Utilization in Saskatchewan" (Master's Thesis, University of Saskatchewan, 1934), p. 37.

⁷See O. E. Baker, "Agricultural Regions of North America, Part VI: The Spring Wheat Region" (*Economic Geography*, vol. IV, 1928, p. 410).

⁸*Census of the Prairie Provinces, 1926: Population and Agriculture* (Ottawa, 1931), pp. 442-3.

⁹In some municipalities in the south-west abandonment has gone on intermittently for nearly 15 years; for instance, in Rural Municipality No. 141 the area of improved land in 1931 was 35 per cent as compared with 31 per cent in

Wheat acreage tends to be highest on the Brown and Dark Brown plains soils and loams. Oats occupy a large part of the cultivated acreage of both the park and wooded soils. Barley production is much more important in the park zone than in any other but rye is more frequently found on sandy soils. Flax production has dwindled in importance because it is generally a profitable crop only on new land free from disease.¹⁰

1926 and 55 per cent in 1921. See *Seventh Census of Canada, 1931. V: Agriculture* (Ottawa, 1934), pp. 636-7; *Census of the Prairie Provinces, 1926*, p. 445; and *Sixth Census of Canada, 1921. V: Agriculture* (Ottawa, 1925), p. 420.

¹⁰Markets for products, proximity to railroads, and freight rates have all been factors influencing land use in Western Canada as elsewhere. See R. E. English, "An Economic History of Northern Alberta" (M.S.A. Thesis, University of Toronto, 1931), chaps. iv-v.

CHAPTER II

RAILWAYS AND POPULATION

(*Railways and continually improving transportation were as essential as rain and sun to progressive settlement on the Canadian prairie*). . . Only with modern railways and cheap ocean transport can the frontier produce bulky staples, such as wheat, for metropolitan markets, and, without markets, the pioneer fringe is condemned to a low and rude standard of living, a precarious existence in which man, unarmed, pits his strength against relentless nature—W. A. MACKINTOSH

1. RAILWAYS¹

Agricultural settlement of the Saskatchewan plains was made possible by transcontinental railways and branch lines.

The inhabitant of the Prairie Provinces, like the inhabitant of other inland plains, is peculiarly dependent on railways. (His agricultural system depends on railway communication.) With the exception of a few of the older towns, the towns and villages are mere points on railways. Where the railway passed a village by, the whole village, buildings as well as people, has frequently been moved across the prairie to the railway. (The railway with its unfailing accompaniments, the loading platform, the two to five grain elevators, the post-office, general store, machinery shed, and branch bank, closes the circuit through which the power of the world's economic organization flows into the pioneer community. What the birch canoe was to the fur trader, the railway is to the farmer of Western Canada.) Beyond

¹On railway development in the Prairie Provinces, see *A Submission by the Government of Saskatchewan to the Royal Commission on Dominion-Provincial Relations* (Canada, 1937) (Regina, 1937), pp. 131 ff.; W. A. Mackintosh, *Prairie Settlement: The Geographical Setting* (Toronto, 1934), chap. iii, and *Economic Problems of the Prairie Provinces* (Toronto, 1935), chap. iii; H. A. Innis, *A History of the Canadian Pacific Railway Company* (London, 1923), chaps. iii and iv, and *Problems of Staple Production in Canada* (Toronto, 1933), pp. 24-59; O. D. Skelton, *The Railway Builders* (Toronto, 1916), chaps. viii-xii; F. A. Talbot, *The Making of a Great Canadian Railway* (London, 1912), chaps. x-xi; D. B. Hanna, *Trains of Recollection* (Toronto, 1924), chaps. v-xvii; M. L. Bladen, "Construction of Railways in Canada. Part II: From 1885 to 1931" (*Contributions to Canadian Economics*, vol. VII, Toronto, 1934, pp. 61-107); W. T. Jackman, *Economic Principles of Transportation* (Toronto, 1935), chaps. i and ii; J. B. Hedges, *The Federal Railway Land Subsidy Policy of Canada* (Cambridge, 1934); L. T. Fournier, *Railway Nationalization in Canada* (Toronto, 1935); *Report of the Royal Commission to Inquire into Railways and Transportation in Canada* (Ottawa, 1917), and *Report of the Royal Commission to Inquire into Railways and Transportation in Canada, 1931-2* (Ottawa, 1932).

the end of the steel there is only such settlement as waits month by month or year by year for the coming of the railway.¹

In 1900 the main line of the Canadian Pacific Railway (completed 1885) stretched across the southern prairies, a branch line extended north from Regina through Saskatoon to Prince Albert, and the Soo Line extended south from Moose Jaw through Estevan to St. Paul, Minnesota, but beyond these links only two or three branch lines from Manitoba extended very short distances into Saskatchewan. (Prairie conditions facilitated rapid and inexpensive construction and the railway mileage of the province more than trebled in the opening decade of the century) (see table III). (This

TABLE III
STEAM RAILWAY MILEAGE IN SASKATCHEWAN, 1900-36*

Year	Mileage	Year	Mileage
1900.....	962	1921.....	6,296
1906.....	1,951	1926.....	7,267
1911.....	3,121	1931.....	8,268
1916.....	5,378	1936.....	8,624

*Information from G. S. Wrong, Dominion Bureau of Statistics.

period saw the completion from Winnipeg to Edmonton of the main lines of the Canadian Northern Railway (1905) and the Grand Trunk Pacific (1910) (the former traversing the park belt, the latter emerging from the park belt to skirt the northern edge of the prairie plains) and the multiplication of feeder lines in the eastern part of the province. Settlement outstripped railway construction on the semi-arid plains but branch lines were rapidly extended into the region between 1911 and 1916. The building programme was interrupted by the war but was renewed again in the twenties, so that by 1931 a railway network covered the agricultural area of the province. Railway construction into the new settlements of the northern wooded area continued after 1930 at a reduced rate and in 1936 Saskatchewan with its 8,624 miles of track had a railway mileage greatly in excess of that possessed by any province in the Dominion with the exception of Ontario.²

Nearly all the land suited to agricultural production in Sas-

¹Mackintosh, *Prairie Settlement: The Geographical Setting*, p. 57.

²See *Canada Year Book*, 1938, p. 643.

katchewan is within 10 miles of a railway. Of all farms reporting in the 1931 census, 80 per cent were less than 10 miles from a railway station and 5.6 per cent more than 15 miles distant. In the large block of agricultural territory between Saskatoon and Regina, 43 per cent of the farms were within 5 miles of a railway shipping point and 1.5 per cent more than 15 miles away. On the pioneer fringe which stretches across the northern part of the province and in the sparsely settled ranch country of the extreme south-west, a much larger proportion of all farms are more than 15 miles from a railway shipping point. Seventy-six per cent of Saskatchewan farmers were within 10 miles of a market town or village and 7.5 per cent more than 15 miles distant.⁴

2. POPULATION

(Railway construction stimulated settlement and in turn received stimulus from the rapid growth of population.) The settlement of Saskatchewan has taken place in the twentieth century and in one generation population increased from less than a hundred thousand to nearly a million.⁵ Expansion during the period from 1901 to 1914, when over half of this tremendous increase took place, was the result of immigration from the British Isles and Europe, from Eastern Canada and the United States. For the ten years beginning with 1905, when the provinces of Saskatchewan and Alberta were carved out of the North West Territories, an average of more than 30,000 immigrants came into Saskatchewan each year from outside Canada. Since 1914 population growth has been much less rapid and immigrants from outside Canada have averaged less than 10,000 a year.⁶ The census of 1931 showed that the movement

⁴See *Seventh Census of Canada, 1931. Census of Agriculture, Final Bulletin no. XIX: Tenure, Farm Values, Farm Facilities and Mortgage Debt, 1931, and Farm Expenses for 1930 by Counties or Census Divisions* (Ottawa, 1933), pp. 47-8.

⁵See A. S. Morton and Chester Martin, *History of Prairie Settlement and "Dominion Lands" Policy* (Toronto, 1938), part I, *passim*; *Report of the Saskatchewan Royal Commission on Immigration and Settlement, 1930* (Regina, 1930); E. H. Oliver, "The Beginnings of White Settlement in Northern Saskatchewan" (*Transactions of the Royal Society of Canada*, sect. II, ser. III, vol. XIX, 1925, pp. 83-129), and "The Settlement of Saskatchewan to 1914" (*ibid.*, vol. XX, 1926, pp. 63-87).

⁶See *Canada Year Book, 1934-35*, pp. 219-20; 1936, p. 193; 1937, p. 200; 1938, p. 201. See also D. A. MacArthur, "Immigration and Colonization in Canada, 1900-1930" (*Pioneer Settlement*, New York, 1932, pp. 22-30); W. A.

of native Canadians from Eastern Canada had not only ceased but had been definitely reversed,⁷ and that natural increase was making a more significant contribution. The high birth-rate and low death-rate of a youthful population might have been expected to go far toward offsetting the decline in immigration, but population leakages have been heavy. The small increase in the population after 1931 (see table IV), accounted for by an increase in females since there was an actual decrease in the number of males, indicates that about 65,000 people left the province in the intercensal period 1931-6 since the excess of births over deaths for the five years was upwards of 70,000 while immigrants giving their destination as Saskatchewan were in the neighbourhood of 3,500.⁸

TABLE IV
POPULATION OF SASKATCHEWAN AND DISTRIBUTION OF
URBAN AND RURAL POPULATION, 1901-36*

Year	Total	Rural	Urban	Rural (per cent)
1901	91,279	77,013	14,266	84.37
1906	257,763	209,301	48,462	81.20
1911	492,432	361,037	131,395	73.32
1916	647,835	471,538	176,297	72.79
1921	757,510	538,552	218,958	71.10
1926	820,738	578,206	242,532	70.45
1931	921,785	630,880	290,905	68.44
1936	930,893	650,522	280,371	69.88

*Compiled from preliminary returns of *Census of the Prairie Provinces, 1936*, and preceding censuses.

In 1936 approximately 70 per cent of the population of the province were classified as rural and although the rate of increase has tended to be greater in urban than in rural areas Saskatchewan is still more definitely rural than any of the provinces with the exception of Prince Edward Island. Saskatchewan's urban popula-

Carrothers, *Emigration from the British Isles* (London, 1929), chaps. xii-xiv; and J. T. Culliton, *Assisted Emigration and Land Settlement with Special Reference to Western Canada* (Montreal, 1928).

⁷See W. B. Hurd, "Population Movements in Canada, 1921-31, and their Implications" (*Papers and Proceedings of the Sixth Annual Meeting of the Canadian Political Science Association*, vol. VI, 1934, pp. 220-37).

⁸See *Annual Reports of the Department of Public Health and the Registrar General as required by the Vital Statistics Act, for the Calendar Year 1936* (Regina, 1938), p. 110; and *Canada Year Book, 1937*, p. 200.

tion is divided among 8 cities, 80 towns,⁹ and 378 villages. Regina, Saskatoon, Moose Jaw, and Prince Albert account for approximately 126,000 or less than 15 per cent of the population, and since there are no other centres of over 6,000 it may be assumed that the remaining 800,000 or 85 per cent of the population are more or less directly connected with agriculture either on the farms or in the villages and larger market towns.

(The average density of rural population in the surveyed areas of Saskatchewan in 1931 was 5.28 to the square mile as compared with 6.75 for Manitoba and 4.20 for Alberta.) (Both Manitoba and Alberta show a less even distribution of rural population than Saskatchewan, which would seem to indicate that Saskatchewan, as a whole, has reached a more advanced stage of settlement than either Manitoba or Alberta.¹⁰) But even in Saskatchewan the distribution is by no means uniform as density of rural population after the pioneer stage has been passed is dependent in large measure on the type of soil. The rich soils of the Carrot River Valley in the north-east support more than twice the population per square mile of the inferior lands of the south-west. Farm units tend to be larger on the open prairie, but rural population densities of less than two persons per square mile are generally confined to ranching areas, and densities of more than ten persons to the square mile are generally associated with racial groups of South, Eastern, or Central European origin characterized by larger families and favouring smaller farms and a more intensive type of agriculture.¹¹

In 1936 only 45.8 per cent of the population were of Anglo-Saxon origin and only the province of Quebec had a larger non-Anglo-Saxon population. Approximately 40 per cent of the rural population of Saskatchewan were classified as of Anglo-Saxon origin (42 per cent for Alberta and 44 per cent for Manitoba); 20 per cent as German; 17 per cent Ukrainian, Russian, Polish, or Roumanian; 9 per cent Scandinavian; and 6 per cent French. Of the remainder,

⁹Saskatchewan "towns" vary in population from less than 200 to nearly 4,000; the average population of the 80 "towns" is about 800.

¹⁰See *The Prairie Provinces in their Relation to the National Economy of Canada: A Statistical Study of their Social and Economic Condition in the Twentieth Century* (Ottawa, 1934), p. 7. See also D. A. MacGibbon, "The Future of the Canadian Export Trade in Wheat" (*Contributions to Canadian Economics*, vol. V, Toronto, 1932, pp. 12-29).

¹¹See Mackintosh, *Prairie Settlement: The Geographical Setting*, pp. 83-5.

groups claiming Dutch and Hungarian origin were the most important.¹²

When classified by birth-place rather than national origin, nearly 78 per cent of Saskatchewan's rural population were presented as British born while of the remaining 22 per cent two-thirds came from continental Europe (South, Eastern, and Central Europeans predominating) and one-third from the United States.¹³ In 1911 one-fifth of the population was born in Saskatchewan and in 1936 more than one-half (see table v). In the same period the proportion of population born in Canada increased from one-half to more than two-thirds while the proportion of those born in the British Isles and in foreign countries fell off sharply.

TABLE V
PERCENTAGE DISTRIBUTION OF THE POPULATION OF SASKATCHEWAN
BY BIRTH-PLACE, 1911-36*

Year	Saskatch- ewan	Prairie Provinces	Canada	British Isles	Total British born	Total foreign born
1911	20.7	25.3	50.5	16.5	67.0	33.0
1916	28.8	33.4	54.5	14.4	68.9	31.1
1921	38.0	42.5	60.4	13.3	73.7	26.3
1926	44.2	48.9	64.0	12.1	76.1	23.9
1931	48.0	53.0	65.4	11.0	76.4	23.6
1936	54.7	59.4	70.2	9.2	79.5	20.5

*Compiled from preliminary returns of *Census of the Prairie Provinces, 1936*, and preceding censuses.

In 1936, 59 per cent of the Anglo-Saxons lived on farms, 74 per cent of the French, 77 per cent of the Dutch, 79 per cent of the Germans, 81 per cent of the Scandinavians, and 83 per cent of the South, Eastern, and Central European groups (including those of Ukrainian, Russian, Polish, or Roumanian extraction)¹⁴. People of British origin are scattered more uniformly over the province than any other group and constitute a high percentage of total population in the south-eastern, central, and north-western sections though many communities are settled almost solidly by European national

¹²*Population Classifications by Provinces: Census of the Prairie Provinces, 1936, Bulletin no. XXIII* (Ottawa, 1937), pp. 9-16. The Mennonites are classified as Dutch and account for the size of this group in Saskatchewan.

¹³*Ibid.*, pp. 17-28. ¹⁴*Ibid.*, pp. 9-16.

groups. The Scandinavian group shows a wide distribution with a tendency toward concentration south and east of the Quill Lakes and east of Prince Albert. Settlers of French origin are concentrated in the area south of Prince Albert with other important settlements around Gravelbourg and La Flèche in the south-west. There is a solid *bloc* of Mennonites immediately north of Saskatoon and a marked concentration of Germans around Humboldt and in the Rosthern and Leader districts. Ukrainians, Russians, and Austrians are all located in large blocks in the eastern part of the park belt and especially in the territory tributary to Yorkton.¹⁵

The influence of a young immigrant population from South, Eastern, and Central Europe has been reflected in the birth-rate though, as in other provinces and most other countries, the birth-rate (see table VI) has shown a strong downward tendency since 1920 when it stood at 29.7 per 1,000 of population.¹⁶ An initial period of settlement characterized by an excess of single males was followed by increases in female immigration, marriages, and births. Factors contributing to a decline in the birth-rate have been less favourable age distribution of women and less favourable conjugal status.¹⁷

The crude birth-rate of a young province is subject to influences such as age and sex distribution and conjugal status, which go far to vitiate comparison with older countries. In 1936 the Saskatchewan birth-rate at 20.5 per 1,000 of population was slightly

¹⁵See W. B. Hurd and T. W. Grindley, *Agriculture, Climate and Population of the Prairie Provinces: A Statistical Atlas showing Past Development and Present Conditions* (Ottawa, 1931), figures 170-82, pp. 87-96. See also C. A. Dawson, *Group Settlement: Ethnic Communities in Western Canada* (Toronto, 1936), parts I, II, and IV; Robert England, *The Central European Immigrant in Canada* (Toronto, 1929), chaps. i-iii, and *The Colonization of Western Canada* (London, 1936), chap. viii, and C. H. Young, *The Ukrainian Canadians: A Study in Assimilation* (Toronto, 1931).

¹⁶The rural birth-rate remains slightly above the rate for the province but shows a similar decline. A coincidence of abnormally high urban rates with low rural rates for a number of years invites the suspicion that although in theory the urban rate includes only urban residents it is not always easy to keep the two rates separate in practice. See *Annual Reports of the Department of Health*, 1926-36 inclusive.

¹⁷See W. B. Hurd, "The Decline in the Canadian Birth-Rate" (*Canadian Journal of Economics and Political Science*, vol. III, Feb., 1937, pp. 40-57), and *The Prairie Provinces in their Relation to the National Economy of Canada*, pp. 18-22. See also H. R. Kemp, "Fertility of Marriage in Canada, 1921" (*Contributions to Canadian Economics*, vol. I, Toronto, 1928, pp. 17-39).

above the Dominion rate of 20.0; was well above British Columbia (14.0), Ontario (16.9), Manitoba (18.1), (and Alberta (20.3)), but was lower than any of the other four provinces. Rates for most Canadian provinces were relatively high compared with those reported by other English-speaking countries and the nations of

TABLE VI
BIRTHS, DEATHS, MARRIAGES, AND NATURAL INCREASE IN SASKATCHEWAN,
1921-37*

Year	BIRTHS		MARRIAGES		DEATHS		NATURAL INCREASE	
	No.	Rate per 1,000	No.	Rate per 1,000	No.	Rate per 1,000	No.	Rate per 1,000
1921.....	22,399	29.7	5,101	6.7	5,589	7.4	16,810	22.3
1926.....	20,716	25.2	5,483	6.7	6,060	7.4	14,656	17.8
1927.....	21,015	25.0	5,733	6.8	6,031	7.2	14,984	17.8
1928.....	21,261	24.7	6,701	7.8	6,166	7.2	15,095	17.5
1929.....	21,446	24.3	6,548	7.4	6,715	7.6	14,731	16.7
1930.....	22,051	24.4	5,717	6.3	6,309	7.0	15,742	17.4
1931.....	21,331	23.1	5,700	6.2	6,066	6.6	15,265	16.5
1932.....	20,814	22.3	5,772	6.2	6,044	6.5	14,770	15.8
1933.....	20,145	21.6	5,371	5.8	6,024	6.5	14,121	15.1
1934.....	19,764	21.2	5,519	5.9	5,924	6.4	13,840	14.8
1935.....	19,569	21.0	6,036	6.5	6,126	6.6	13,443	14.4
1936.....	19,125	20.5	6,168	6.6	6,314	6.8	12,811	13.7
1937.....	18,614	19.8	5,781	6.2	6,891	7.3	11,723	12.5

*Compiled from Dominion and Saskatchewan Vital Statistics Reports.

northern Europe, but much lower than some of the countries from which Saskatchewan has drawn a large part of her immigrant population.¹⁸ An analysis of Saskatchewan legitimate births in 1933 showed the "English and other British" rate to be identical with that given for England and Wales in 1932, namely 15.3, while the rate for the larger South, Eastern, and Central European origin groups was almost double.¹⁹

¹⁸*Canada Year Book, 1937*, p. 166. In 1934 the rate for Austria was 13.5; Sweden, 13.7; Norway, 14.6; England and Wales, 14.8; France, 16.1; Belgium, 16.1; Australia, 16.4; New Zealand, 16.5; United States, 17.1; and Germany, 18.0. The rate for Russia (1929) was 38.6; the Ukraine (1929), 35.3; and Poland (1934), 26.5.

¹⁹*See Annual Report of the Department of Health, 1933*, p. 101.

A similar relationship was observable with respect to illegitimacy though the rate per 100,000 of population was highest for the Indian (272.9) and lowest for the Icelandic (25.2). The rates of the groups which contributed most in absolute numbers were English, 57.5; German, 84.8; French, 100.1; and Ukrainian, 119.2.²⁰ Illegitimacy in the province increased from an average of 8.3 per 1,000 births for the ten-year period from 1914 to 1923 to 36.0 in 1936.²¹ A large part of this apparent increase is probably due to more complete reporting of such births and to changes in the age and sex distribution of the population, but the sharp increase since 1928 when the rate stood at 21.2 may indicate that the depression has been a factor in recent years.²² Nevertheless the 1936 rate was still below the Dominion rate (39.0), and has never been high compared with other parts of the British Empire or with most European countries.²³

The last few years have seen a decline in the percentage of births (legitimate and otherwise) to parents of Anglo-Saxon origin relatively to those of non-Anglo-Saxon origin in Saskatchewan, but since a large proportion of the latter entered the country during the last fifteen years it is too soon to be able to reach any conclusions as to the effect upon the various racial birth-rates of the changed living standards involved in the process of Canadianization. The proportion of births to Canadian-born parents has been steadily increasing and the provincial birth-rate has been falling, which suggests that a downward trend in the birth-rate of most racial groups may be looked for when the immigrant gives place to generations born in the country.²⁴ The experience of the United

²⁰*Ibid.*, p. 99.

²¹*Vital Statistics of Canada, 1936: Preliminary Annual Report* (Ottawa, 1937), p. 2.

²²See D. S. Thomas, *Social Aspects of the Business Cycle* (London, 1925), pp. 100-1.

²³See S. de Jastrzebski, "Illegitimacy" in the *Encyclopaedia Britannica* (ed. 14), vol. XII, pp. 84-5.

²⁴On the other hand: "The evidence so far available indicates an increase rather than a decrease in the second generation. With the Anglo-Saxons, on the other hand, the birth rate has been falling, and their continued movement to the cities may be expected to reduce it still further and thus tend to offset any further decline in the fertility of non-British stocks. The prospect, therefore, is for the indefinite continuation of marked differences in the rates of increase of the different population elements in the middle west and unless the Anglo-Saxon population is materially augmented by immigration, its numerical domina-

States, where economic and social conditions have been similar, and the falling birth-rate of that country appear to support this view.

The marriage-rate is regarded as an index to the level of prosperity.²⁵ The Canadian rate declined from a high point of 7.6 per 1,000 of population in 1929 to 6.0 in 1933, but recovered to 7.3 in 1936. In 1928 the Saskatchewan marriage-rate reached a peak of 7.8, which was higher than any other province except Alberta (8.8); by 1933 it had fallen to 5.6, and although it recovered to 6.6 in 1936 it was still lower than any province except Prince Edward Island (6.5).²⁶ The number of women from English-speaking countries marrying men from non-English-speaking countries is usually about three times as great as that for non-English-speaking brides and English-speaking bridegrooms, probably as a result of the large excess of single male immigrants from Europe over single females.²⁷ Provincial figures for intermarriage based upon birth-place do not give as accurate a picture of the fusion of races as figures indicating the racial origins of the contracting parties, but it has been established that intermarriage between the British and North-western European stocks is very much more common than between the British and South, Eastern, and Central European stocks.²⁸ *Bloc* settlement of the latter groups combined with greater racial and cultural differences have been effectual barriers.

Intermarriage, especially with small minority groups, is at once a means and an index of assimilation and in no country has the melting pot idea been more effectively exploded than in . . . Western Canada and British Columbia where solid foreign blocks continue to maintain a separate social existence and intermarriage with the basic stocks of the country is thwarted at once

tion will soon be a thing of the past" (W. B. Hurd, "The Relation of the Origins of Immigrants to the Settlement of the Country", *Papers and Proceedings of the Second Annual Meeting of the Canadian Political Science Association*, vol. II, 1930, p. 53).

²⁵See Thomas, *Social Aspects of the Business Cycle*, chap. iii.

²⁶See *Vital Statistics of Canada, 1936: Preliminary Annual Report*, p. 4. It has been observed in England that the number of marriages tended to be high when the price of wheat was low and to be low when the price of wheat was high. The exact reverse has been true in Saskatchewan.

²⁷See W. B. Hurd, "Population Movements in Canada, 1921-31: Some Further Considerations" (*Canadian Journal of Economics and Political Science*, vol. I, May, 1935, p. 224).

²⁸See *Origin, Birthplace, Nationality and Language of the Canadian People* (Ottawa, 1929), pp. 23-5, 116-39.

by the magnitude of the original racial and cultural differences as well as by occupational and geographical segregation. In the case of such groups, cultural assimilation is proceeding with the utmost difficulty and racial fusion scarcely at all. . . . As the years go by foreign blocks, instead of dissolving are increasing in size and density.²⁹

TABLE VII
PERCENTAGE DISTRIBUTION BY AGE GROUPS OF THE POPULATION OF
SASKATCHEWAN AND CANADA, BOTH SEXES, 1931*

Age	Saskatch- ewan	Canada	Age	Saskatch- ewan	Canada	Age	Saskatch- ewan	Canada
0-4	11.42	10.36	30-4	6.28	6.83	60-4	1.98	2.84
5-9	12.07	10.92	35-9	6.44	6.64	65-9	1.45	2.23
10-4	11.94	10.35	40-4	6.39	6.23	70-4	1.04	1.65
15-9	10.96	10.02	45-9	5.76	5.64	75-9	0.53	0.95
20-4	8.89	8.78	50-4	4.34	4.71	80-4	0.23	0.47
25-9	7.32	7.58	55-9	2.85	3.54	85-	0.10	0.24

*From *Seventh Census of Canada, 1931, III: Ages of the People* (Ottawa, 1935), table V, pp. 22-7.

Although the death-rate has declined steadily over the last two generations with the advance of medical science and sanitation, Saskatchewan has the lowest death-rate in the world, being 6.8 per 1,000 of population in 1936 as compared with 8.0 for Alberta, 8.7 for Manitoba, and 9.7 for the Dominion.³⁰ The low rate for Saskatchewan and the other Prairie Provinces is partly a result of the age distribution (see table VII) resulting from a large immigrant population containing a smaller proportion of people of advanced years than would be found in older communities.³¹ As a result of a relatively high birth-rate combined with an extremely low death-rate, the Saskatchewan rate of natural increase reached a maximum of 22.6 in 1920, but declined to 13.7 in 1936 compared

²⁹Hurd, "The Relation of the Origins of Immigrants to the Settlement of the Country", pp. 52-5. But see also Dawson, *Group Settlement: Ethnic Communities in Western Canada, passim*; and England, *The Central European Immigrant in Canada*, pp. 101-3, and *The Colonization of Western Canada*, chap. viii.

³⁰Other countries with low death-rates (1934) were the Netherlands, 8.4; New Zealand, 8.5; Australia, 9.3. The Scandinavian countries had rates from 9.9 to 11.2; Germany, 10.9; United States, 11.0; England and Wales, 11.8; France, 15.1; and Russia (1929), 20.6 (*Canada Year Book, 1937*, p. 180).

³¹Credit must be given to the provincial Department of Public Health, especially for its energetic campaign against communicable diseases. See also below chap. vi.

with 14.0 for Quebec (regarded as being an extremely high rate), 12.3 for Alberta, and 10.3 for the Dominion.³² The decline in the rate of natural increase and in the excess of births over deaths (table VI) had begun before the depression, and in view of modern trends it seems likely that the birth-rate will continue to show a downward inclination. At the same time, as the age distribution of the population tends to approximate that of older communities the death-rate may be expected to rise. For these reasons, and barring the unlikely resumption of immigration on a fairly large scale, population growth from natural increase is likely to be smaller in the future.

³²In 1934 the rate for the Union of South Africa (white) was 13.7; the Netherlands, 12.3; Japan, 11.9; Germany, 7.1; New Zealand, 7.1; Australia, 6.2; United States, 6.1; Norway, 4.7; England and Wales, 3.0; and France, 1.0. Russia reported a rate of 18.0 in 1929 (*Canada Year Book*, 1937, p. 189).

CHAPTER III

THE DISTRIBUTING STRUCTURE

Urban centres were created in direct relation to the railroads and the convenience of elevators for grain shipment, e.g., approximately eight miles apart with loading platforms four miles. These centres became distributing points for supplies, e.g., agricultural implements, lumber, coal and general merchandise. Larger centres flourished at divisional points located approximately one hundred and ten to one hundred and thirty miles apart, depending on accessibility of water and the efficiency of engines, at which engines and train crews were changed. The largest centres were dependent on the location of branch lines and junction points, of terminal points, and the stimulus to population afforded by government buildings, educational facilities, and wholesale houses. . . . Settlement in Western Canada differs fundamentally from settlement in Eastern Canada and in the old world.—H. A. INNIS

Railway branch lines radiate from the principal cities of Saskatchewan and these centres can scarcely be said to have any commercial or industrial existence independent of agriculture. Saskatoon may exercise a measure of commercial domination over northern Saskatchewan, including the cities of Prince Albert and North Battleford and such towns as Melfort, Humboldt, Biggar, and Rosetown, while Regina occupies a similar position in southern Saskatchewan, but both Saskatoon and Regina have failed thus far to develop other important attributes of metropolitan centres, such as mature financial organizations, so that the province of Saskatchewan has provided a large part of the hinterland necessary to the growth of Winnipeg to metropolitan stature. The newness of the country and a consequent dependence on outside capital for the exploitation of natural resources, together with the pronounced emphasis on agricultural development, have conspired to prevent the emergence of a metropolitan centre in Saskatchewan. The cities serve for the most part as distributing centres for the agricultural community so that rail transportation and wholesale trade absorb the energies of a large part of their populations. The larger government institutions have been shared by the cities with the Parliament Buildings at Regina, the provincial University at Saskatoon, the federal penitentiary and a provincial jail at Prince Albert, and mental hospitals at North Battleford and Weyburn.

1. DISTRIBUTION

The wholesale business is concentrated in a few distributing centres, of which Regina and Saskatoon are by far the most important, though wholesale services are extended from smaller distributing points such as Moose Jaw, Prince Albert, North Battleford, Swift Current, Weyburn, and Yorkton. Improved highways and the wide use of the automobile have enabled the department stores of the cities to play an increasingly important part in retail distribution to the rural population. The same factors have facilitated an increased concentration of specialized professional and other services in the larger centres.¹

In the towns, villages, and hamlets which serve the rural areas, the country general store, or general merchandise store, is the most common retail unit.² Country general stores had 41 per cent of all the trade in centres of less than 1,000 population in Saskatchewan in 1930 and 20 per cent of the total trade of the province as compared with 8 per cent of the total trade of Canada as a whole.³ At the same time the average turnover of general stores in Saskatchewan was very much higher than in Eastern Canada or the Maritimes.⁴ Such stores usually carry a wide variety of goods including groceries, clothing and dry goods, a certain amount of hardware, and, at times, even furniture and farm machinery. Of late years in Saskatchewan, as in the other Prairie Provinces, the importance of the general store as a vendor of groceries and food-stuffs has tended to decline with the spread of the chain grocery store. The better type of village or small town⁵ with a population of from 250 to 800 and serving a well-established agricultural territory is likely to maintain two or three general stores, a similar number of automotive and of farm implement establishments, one

¹The number of branches of banks in Saskatchewan in 1938 (248) was less than half the number for 1920 (591). Amalgamation, retrenchment, and depression were factors in the reduction of the total number of branches in Canada from 4,676 in 1920 to 3,336 in 1938, but the movement was most apparent in the closing of country branches in Saskatchewan and Alberta.

²The cross-roads store is a comparatively rare sight in the established agricultural sections of Saskatchewan.

³See *Census of Merchandising and Service Establishments: Retail Trade in Urban and Rural Areas, Canada, 1930* (Ottawa, 1935), p. 5.

⁴*Ibid.*, p. 26.

⁵It should be remembered that 65 of Saskatchewan's 80 "towns" have a population of less than 1,000 and only 2 have more than 2,000.

hardware, one chain grocery store, one meat market, one drug store, one blacksmith shop, one or two lumber yards, one or two Chinese restaurants, and, more rarely, one hotel. Not all of these businesses will be operated as separate establishments since frequently two or more are combined under one roof. The post office is often housed in one of the stores. There are not likely to be any apparel or furniture stores apart from the general stores. For instance, in 1930, apparel and furniture stores accounted for less than one per cent of all sales in places of less than 1,000 population while food and general stores accounted for 50 per cent; the building materials group, 17 per cent; the automotive group, 14 per cent; and all others, including farm implement establishments, drug stores, and government liquor stores, etc., made up 19 per cent of such sales.⁶ Naturally the larger towns possess a more ambitious retail set-up and a wider variety of stores.

Many of the villages and towns have decreased in size and importance as distributing centres during the post-war period, largely as a result of the increased use of the automobile and the improvement of highways and roads enabling the farmer to transact his business at a larger centre, where he has the advantage of a much wider choice of goods and of lower prices as well as opportunity to avail himself of professional and other services. The western village and hamlet has a more or less fluctuating population housed in small frame houses or bungalows of no particular design, and little attempt is made to give either form or beauty to the streets and buildings. A sharp distinction is evident between the large number of moribund villages and the much smaller number of flourishing villages and towns with from 500 to 1,000 population, where a definite spirit of civic pride contributes vitality to the entire community. The latter have divided with the cities the gains from the weaker units made possible by improved rural transport and communication and may be expected to consolidate their gains since they occupy a strategic position, as compared with larger but more distant centres, for the distribution of many commodities and for the provision of necessary repairs and general servicing required by an agricultural community utilizing large-scale machinery and mechanical power.

The small proprietors of independent country general stores have been fighting a losing battle. They had long been accustomed

⁶See *Retail Trade in Urban and Rural Areas, Canada, 1930*, p. 14.

to regard the mail-order house as their chief adversary, but over the last fifteen years they have been forced to recognize the inroads made upon their business by the city department stores. To these formidable rivals has now been added the chain store with its well-known advantages in handling certain types of goods. From the point of view of the rural as well as the urban shopper, chain grocery stores are frequently preferred because of their clean and attractive appearance and the freshness and uniform quality of the goods offered for sale. In 1930 chain country general stores in Saskatchewan had 22 per cent of the total sales of this type of store while in the same rural trade field chain grocery and combination (grocery and meat) stores had 60 per cent of the total sales for this group.⁷ Chain grocery and combination (grocery and meat) store sales for the whole province remained relatively constant throughout the period 1930 to 1937, making up 41.7 per cent of the total sales for this class of store in 1937 as compared with 40.3 per cent in 1930,⁸ when 44 per cent of all the chain grocery stores in Saskatchewan were located in places with less than 1,000 population as compared with only 18 per cent for Alberta, 7 per cent for Manitoba, and 9 per cent for the Dominion.⁹ The ratio of chain store sales to all retail sales in Saskatchewan stood at 18.0 per cent in 1930 and at 17.6 per cent in 1937.¹⁰ The proportion of the total retail trade claimed by the chains in Saskatchewan, the most rural of the three Prairie Provinces, was somewhat higher in the latter year than in either Alberta (17.3 per cent), or Manitoba

⁷Separate figures for smaller centres are not available for recent years. See *Seventh Census of Canada, 1931. Census of Merchandising and Service Establishments: Retail Trade, Saskatchewan* (Ottawa, 1935), pp. 74-81. "A chain is defined as a group of stores of the same or similar kind of business, centrally owned and operated, and stocked with merchandise placed through a central buying office" (*ibid.*, p. x).

⁸Information for 1937 from Internal Trade Branch, Dominion Bureau of Statistics, Ottawa, Dec., 1938. See also *Census of Merchandising and Service Establishments: Retail Merchandise Trade in the Prairie Provinces, 1935* (Ottawa, 1936), p. 2.

⁹See *Retail Trade in Urban and Rural Areas, Canada, 1930*, pp. 46-7.

¹⁰See *Census of Merchandising and Service Establishments: Retail Merchandise Trade in Canada, 1937* (Ottawa, 1938), pp. 12-13. The slight decline in the ratio of chain to total sales may be attributed to the transition of a large number of filling stations from company-operated to the leased station type, involving removal of such units from the chain store category.

(11.2 per cent), which would seem to indicate that chain store organization is readily adaptable to rural trade.

Consumers' co-operation in Saskatchewan has never been as firmly rooted as producers' co-operation, but it is represented by a Wholesale Co-operative Society, a co-operative refinery, co-operative stores, and co-operative trading associations in rural communities. A number of the stores and trading associations have been conspicuously successful. In 1937 the 40 co-operative stores reporting had approximately 6,300 shareholders and total sales amounting to \$1,772,165, while the 243 co-operative associations trading in car-lot quantities and handling bulk staples such as coal, binder-twine, and fuel oil had 13,998 members and total sales of \$1,332,241.¹¹

The mail-order house is an important institution in rural distribution and in the life of the western farm family. The attractively designed catalogues issued by the two large mail-order houses of Western Canada, the T. Eaton Company, Winnipeg, and the Robert Simpson Company, Regina, list a wide range of commodities including every kind of clothing and dry goods, groceries, hardware, furniture, farm machinery, books, school supplies, musical instruments, and toys. By far the greater part of wearing apparel for women and children on the farms is purchased from the mail-order houses, because of the lower prices, a much wider selection from which to choose, and generous services in the way of exchanging goods which are unsatisfactory. Unfortunately no definite information is available as to the proportion of total rural sales secured by mail-order houses. Table VIII compiled from the evidence of the Royal Commission on Price Spreads, shows the sales of the three largest mail-order houses serving the Prairie Provinces from 1930 to 1933. In 1930 there were nine smaller houses operating in the same field bringing the total mail-order sales for that year up to nearly \$29,500,000.¹² Mail-order sales

¹¹See *Annual Report of the Commissioner of Co-operation and Markets, Department of Agriculture, Saskatchewan, 1938* (Regina, 1938), p. 103. The Consumers' Refineries Co-operative Association which commenced operations at its Regina plant in May, 1935, was the first co-operative refinery in Canada. For an account of its operations and its distributing organization, see Richard Heron, "Oil Well to Tractor" (*Country Guide and Nor'-West Farmer*, Aug., 1937, p. 12).

¹²Information by correspondence from H. Marshall, Chief, Internal Trade Branch, Dominion Bureau of Statistics, Ottawa, July and Aug., 1935. It is interesting to note that while the total volume of retail trade in the Prairie

are not made exclusively to the rural population, but when it is remembered that Saskatchewan contains 43 per cent of the rural population of the Prairie Provinces it is evident the farming community of Saskatchewan must account for a large proportion of these sales.

TABLE VIII

MAIL-ORDER SALES OF THE THREE LARGEST MAIL-ORDER HOUSES IN THE PRAIRIE PROVINCES, 1930-3*

Year	T. Eaton Co., Winnipeg	Robert Simpson Co., Regina	Army and Navy Store, Regina	Total
1930.....	\$22,027,000	\$5,108,073	\$1,108,798	\$28,243,871
1931.....	17,382,000	4,571,259	1,608,661	23,561,920
1932.....	16,621,000	3,593,153	1,691,287	21,905,440
1933.....	17,139,000	4,179,853	1,309,052	22,627,905

*Compiled from *Report of Proceedings of the Royal Commission on Price Spreads, 1935* (Ottawa, 1935), pp. 2700, 3478, 3849.

In a community survey carried out in the rural municipality of Livingstone in the east-central part of the province it was found that the amount spent in the purchase of money orders and postal notes for the year ending February 28, 1931, was just under \$40,000¹³ in each of the villages of Arran (population, 188) and Pelly (population, 241).

It is estimated that 90% of this money went to the mail order houses, Eaton's predominating. Arran's yearly turnover based upon that of one of the leading merchants is estimated at \$100,000. Similarly that of Pelly is estimated at \$125,000. This gives an idea of the inroads mail order shopping makes on the prosperity of the towns. Yet mail order shopping has come as a marvellous boon to isolated communities both from the standpoint of goods and styles obtainable and from the standpoint of reduction in prices. The mail order house has put the local merchant on his mettle. Apparently the arena is set for a struggle between the mail order house and the system of chain stores.¹⁴

Provinces fell 40 per cent between 1930 and 1933—from \$555,000,000 in 1930 to \$333,000,000 in 1933—the volume of mail-order sales would appear to have declined by not much over 20 per cent. For an analysis of the volume of retail trade in Saskatchewan see below chap. vii.

¹³Arran, \$39,477; Pelly, \$39,885.

¹⁴Gertrude S. Telford, "Livingstone: A Social Survey" (Master's Thesis, McMaster University, 1931), p. 39.

The history of the mail-order business in Canada down to the present time has been summarized in the Report of the Royal Commission on Price Spreads:

From its establishment early in the century it increased rapidly in volume, particularly during the later years of the war, and reached its peak in 1920. From that point, however, mail order business has lost ground, largely owing to the improvement in communications, and the urbanization of a section of the rural population. At its peak, catalogues issued twice a year by one company contained 588 illustrated pages, and over 1,000,000 copies of each issue were distributed [free] at a cost of approximately \$1.00 per catalogue.¹⁵

Although the relative importance of the mail-order house has tended to decline with the increased use of the automobile and the introduction by the railway companies of low excursion and weekend fares to the cities, the decline has probably been less marked in Saskatchewan than in any other province. The volume of mail-order sales is still large and the mail-order house bids fair to hold an important place in the distributing structure of rural Saskatchewan for a long time to come.

In addition to serving as local distributing centres, the towns and villages provide such facilities as banking and insurance, certain professional services, and, above all, the machinery for handling and purchasing grain and other farm products. Practically the only industries carried on are those closely connected with the agricultural life of the community, flour and grist mills, creameries and cheese factories being the most numerous.

Nearly every town and village in Saskatchewan is dominated by the row of tall grain elevators beside the railroad track and one or more of these elevators is to be found at nearly every railway siding in the grain-growing area. While there were 458 towns and villages in the province in 1937, 3,222 country elevators with a total storage capacity of 100,851,000 bushels were distributed among nearly 1,100 shipping points or stations. The Saskatchewan Co-operative Wheat Producers Limited (more commonly known as the Wheat Pool) owns and operates 1,085, or more than one-third, of the country grain elevators, and handles approximately 45 per cent of all the grain delivered each year.¹⁶ Among the larger private elevator companies operating in the province in 1937 were the Federal Grain Company with 284 Saskatchewan elevators; the

¹⁵*Report of the Royal Commission on Price Spreads, 1935* (Ottawa, 1935), p. 205.

¹⁶*See Annual Reports of Saskatchewan Co-operative Wheat Producers, Limited.*

Searle Grain Company, 170; Western Grain Company, 168; Reliance Grain Company, 157; Pioneer Grain Company, 142.¹⁷

There were 45 small flour and grist mills in the province in 1929 with a combined maximum daily capacity of 7,000 barrels but probably one-half were inactive. In 1935 there were approximately 55 small mills operating with a combined daily capacity of 7,860 barrels.¹⁸ Most of the increased capacity was installed during the years 1931 and 1932 when farmers, owing to low wheat prices and to crop failures, were anxious to economize by buying flour that was cheaper than the standard brands of the larger mills, though in many cases greatly inferior in quality. "The past year", wrote an official of one of the large mills in 1935, "has not been such a profitable one for the small mills due . . . to the fact that the larger mills were more competitive in price. Furthermore there were many districts in the province where the small mill was unable to obtain sufficient supplies of wheat locally to keep operating."¹⁹ In districts favoured by crops sporadic attempts have been made by small mills during the last ten years to stimulate the demand for cereals by the production of various kinds of breakfast foods such as rolled and cracked wheat and new combinations of cereals. On account of the smallness of the plants the supply has been limited and has been marketed in a restricted area.

The number of creameries in operation in the province decreased from a maximum of 82 in the years 1926-8 to 61 in 1937. Nearly all the creameries closed were located in the smaller towns and villages and were characterized by extremely high manufacturing costs.²⁰ Of those in operation in 1937, 25 were located in the cities and 36 in the smaller centres. Only four of the 61 can be classified as strictly co-operative as the Saskatchewan Co-operative Creameries with 21 branches is a joint stock company operated by a receiver. Four other companies control a total of 18 plants while the remaining plants are operated by small privately owned companies. Reductions in overhead and operating costs were made

¹⁷See *List of Grain Elevators in the Western and Eastern Divisions, License Year 1936-37* (Ottawa, 1937), pp. 45-125.

¹⁸Information by correspondence from W. P. Noble, Division Sales Manager, Quaker Oats Company, Saskatoon, June, 1935.

¹⁹*Ibid.*

²⁰See E. G. Misener, *An Economic Survey of the Dairy Industry in Saskatchewan* (Regina, 1930, mimeo.).

possible by the closing of small plants and the rapid increase in production of creamery butter from an annual average of 13,312,000 lbs. for the years 1926-8 to a record figure of 23,572,000 lbs. in 1937.²¹ Cheese production though of less economic importance shows a similar increase. In 1937 there were 14 small cheese factories in the province, at least half of these being situated in French settlements; only one factory was located in a city.²²

2. MANUFACTURING

Such secondary industries as are found in the larger centres are concerned chiefly with the processing of agricultural products (flour mills, creameries, meat packing plants, etc.) or in manufacturing and assembling commodities used in an agricultural community (oil refineries, planing mills, small foundries, machine shops, etc.). Table IX shows the relative importance and total value of production of the leading industries of the province in 1935 together with the capital investment and number of persons employed in them. In the same year the value of industrial production in Alberta exceeded that of Saskatchewan by more than 50 per cent while Manitoba's industrial production was two and a half times that of Saskatchewan's.

The distribution of the gainfully employed by industry groups emphasizes both the significance of agriculture and the comparative unimportance of other occupations. Table x shows this percentage distribution for each of the three Prairie Provinces and for Canada. Agriculture engages a larger proportion of the population in Saskatchewan than in any other province while at the same time the proportions engaged in manufacturing, mining, and forestry are smaller, with the sole exceptions of New Brunswick in manufacturing and Prince Edward Island in mining, than in any other part of the Dominion.

There is, for Saskatchewan, no important source of income which does not derive, in the final analysis, from agriculture. The extent to which the province depends directly upon the basic industry and the relatively slight economic importance of manu-

²¹See *Canada Year Book*, 1938, p. 257. On the development of creameries and cheese factories in Saskatchewan, see H. A. Innis *et al.*, *The Dairy Industry in Canada* (Toronto, 1937), pp. 39-41, 53, 104, and 112-14.

²²Information on numbers and locations of creameries and cheese factories from the Dairy Commissioner, Department of Agriculture, Regina.

TABLE IX

PRINCIPAL STATISTICS OF LEADING INDUSTRIES OF THE PROVINCE OF SASKATCHEWAN, 1935*

Industries	Number of establishments	Capital invested (thousands of dollars)	Total employees	Total salaries and wages (thousands of dollars)	Cost of materials used (thousands of dollars)	Gross value of production (thousands of dollars)
1. Flour and feed mills.....	80	13,557	579	620	9,321	12,785
2. Butter and cheese.....	74	3,554	801	827	4,368	6,558
3. Slaughtering and meat packing.....	6	2,412	648	643	5,300	6,501
4. Petroleum.....	14	4,970	418	526	4,176	5,684
5. Central electric stations.....	125	25,577	552	785	—	4,377
6. Printing and publishing.....	126	2,521	826	1,081	417	2,302
7. Bread and other bakery products....	148	2,020	540	428	863	1,681
8. Breweries.....	9	3,245	248	289	576	1,598
9. Sawmills.....	121	631	468	180	277	625
10. Dyeing, cleaning, and laundry work..	15	779	256	190	60	413
TOTAL, TEN LEADING INDUSTRIES.....	718	59,266	5,336	5,569	25,358	42,524
TOTAL, ALL INDUSTRIES.....	880	66,271	6,355	6,524	28,047	46,821

*Supplied by the General Manufactures Branch, Dominion Bureau of Statistics.

NOTE: Statistics for "non-ferrous metal smelting and refining" which is also one of the leading industries of this province, cannot be published since there are less than three establishments reporting.

TABLE X

PERCENTAGE DISTRIBUTION OF GAINFULLY EMPLOYED BY INDUSTRY GROUPS
FOR THE PRAIRIE PROVINCES AND CANADA, 1931*

Industry groups	Manitoba	Saskatch- ewan	Alberta	Canada
Agriculture.....	34.45	60.31	50.89	28.73
Forestry, fishing, and trapping....	1.73	0.71	0.95	2.48
Mining, quarrying, oil and salt wells.....	0.78	0.24	3.85	1.83
Manufacturing.....	9.76	2.71	4.84	16.08
Electric light and power.....	0.50	0.19	0.21	0.48
Construction.....	5.83	3.53	3.76	6.52
Transportation and communication†	8.78	6.36	7.04	7.80
Trade.....	11.53	6.43	7.62	9.85
Finance.....	2.53	1.46	1.66	2.35
Service.....	19.65	15.33	16.67	19.52
Unspecified.....	4.39	2.67	2.47	4.31
TOTALS.....	100.00	100.00	100.00	100.00

**Seventh Census of Canada, 1931, Bulletin no. XXXI: Gainfully Employed Ten Years of Age and Over for Canada and the Provinces* (Ottawa, 1933), pp. 8-9.

†Does not include Postal Service.

facturing, mining, and lumbering are illustrated by production statistics.²³ In 1936 agriculture accounted for 79 per cent of the value of all production in Saskatchewan as compared with 62.9 per cent in Alberta, 39.8 per cent in Manitoba, and 25.9 per cent for the Dominion as a whole, while the manufactures of Saskatchewan comprised a much larger proportion of processed agricultural products than in any other province.²⁴

²³See *A Submission by the Government of Saskatchewan to the Royal Commission on Dominion-Provincial Relations* (Canada, 1937) (Regina, 1937), p. 169; and *Survey of Production in Canada, 1936* (Ottawa, 1938), p. 8.

²⁴The composition of freight loaded on cars in Saskatchewan in 1936 was: agricultural products, 79.5 per cent; mineral products, 8.8 per cent; forest products, 5.1 per cent; manufacturing and miscellaneous, 6.6 per cent. See *Supplement to the Prairie Provinces in their Relation to the National Economy of Canada* (Ottawa, 1937). See also D. C. MacGregor, "Income and Expenditure in Alberta: A Revision" (*Canadian Journal of Economics and Political Science*, vol. II, Nov., 1936, pp. 533-43).

CHAPTER IV

THE WHEAT ECONOMY

The first period, 1870-1885, was marked by an ignorant optimism ending in disillusionment. In the second period, 1885-1900, the problems of agriculture in a semi-arid land were faced with courage and were partially solved by science and by experience. The third period, 1900-1915, rejoiced in sufficient moisture, and in rising prices for wheat, accompanied by a great rush of immigrants and by a rapid development of the means of transportation. The period, 1915-1930, opened with the call for greater production of wheat and livestock to meet the necessities of the war.—A. S. MORTON

1. AGRICULTURAL SETTLEMENT AND EXPANSION¹

Agricultural settlement in Saskatchewan, determined by the railways, made comparatively little progress before 1900, being confined very largely to the south-eastern part of the province adjacent to the settled areas of Manitoba, and, further north and west, to the park land of the Prince Albert district between the two branches of the Saskatchewan River. "The Canadian Pacific Railway . . . became directly interested in the colonization of the prairies for two reasons, first, for the disposal of its land, second,

¹See W. A. Mackintosh, *Prairie Settlement: The Geographical Setting* (Toronto, 1934), chaps. ii-vi, and *Economic Problems of the Prairie Provinces* (Toronto, 1935), chaps. i-ii; R. W. Murchie et al., *Agricultural Progress on the Prairie Frontier* (Toronto, 1936), chaps. i-vii; A. S. Morton and Chester Martin, *History of Prairie Settlement and "Dominion Lands" Policy* (Toronto, 1938), *passim*; Robert England, *The Colonization of Western Canada* (London, 1936), chaps. i-vii; D. A. MacGibbon, *The Canadian Grain Trade* (Toronto, 1932); W. W. Swanson and P. C. Armstrong, *Wheat* (Toronto, 1930); J. W. Dafoe, *Clifford Sifton in Relation to His Times* (Toronto, 1931), chaps. v and xi; James Mavor, *My Windows on the Street of the World* (Toronto, 1923), vol. I, chap. xxiv; E. H. Oliver, "The Beginnings of Agriculture in Saskatchewan" (*Transactions of the Royal Society of Canada*, sect. II, ser. III, vol. XXIX, 1935, pp. 1-32); S. D. Clark, "Settlement in Saskatchewan with Special Reference to Dry Farming" (Master's Thesis, University of Saskatchewan, 1931); N. F. Black, *History of Saskatchewan and the Old North West* (Regina, 1913), chaps. xii-lii; John Hawkes, *The Story of Saskatchewan and its People* (Regina, 1924); *Narratives of Saskatoon, 1882-1912* (Saskatoon, 1927); Thorstein B. Veblen, "The Price of Wheat since 1867" (*Journal of Political Economy*, vol. I, 1892-3, pp. 68-103), and "The Food Supply and the Price of Wheat" (*ibid.*, pp. 365-79).

to provide traffic for its lines",² but apart from the ranchers, early settlers in Western Canada were reluctant to exchange the obvious advantages of the park country for the bleakness and apparent sterility of the treeless short-grass plains. A large Mennonite group struck out in 1875 and established a successful settlement on the plains of southern Manitoba,³ but other attempts, especially in Saskatchewan, were less successful, and, even with the support of transportation, it was not until Western Canada was able to borrow experience and techniques from the Western United States that prairie settlement on an extensive scale was possible.

By the time a favourable conjuncture of costs and prices had opened the way to the exploitation of the Canadian plains, the westward-moving agricultural frontier of the United States had gathered experience and fashioned instruments which the Canadian settler could borrow. The chilled steel plough, light but capable of turning the tough prairie sod, had been constructed in 1870. In 1878 the invention of roller milling had converted the hardness of the spring wheat of the northern plains from a blemish to a virtue. In 1880 Appleton's improvement of the twine binder contributed to that economy of labour and speed of work which is the necessary characteristic of agriculture on the northern plains of North America. So important a contribution was the construction of mechanical grain elevators that they became as characteristic of prairie landscape as the native vegetation.

(In Utah, the Mormon colony had developed by experimentation the dry-farming practice of summerfallowing without which the semi-arid plains were closed to agriculture.) Elsewhere in the western United States less striking but none the less important contributions to the technique of settlement and of extensive agriculture were made. The flat furrow, the sod house, the tar-paper shack, the "dug-out" for storing water were a few among many tools of settlement borrowed by the Canadian settler from his neighbour in the United States.⁴

²W. A. Carrothers, "History of Immigration Policy and Company Colonization", part II, chap. ii (from proofs of MS. kindly lent by the Macmillan Company of Canada, July, 1937): "The Canadian Pacific Railway became more directly interested in European immigration in 1903 through the purchase of fifteen ships from the Elder Dempster Company, to inaugurate a transatlantic service." With reference to the grant of public lands to the C.P.R., Professor Morton observes: "This land grant made the Canadian Pacific, next to the Government, the most potent immigration agency in the country" (*History of Prairie Settlement and "Dominion Lands" Policy*, p. 65).

³J. W. Dafoe, "Economic History of the Prairie Provinces, 1870-1913" (*Canada and its Provinces*, Toronto, 1914, vol. XX, p. 295).

⁴Mackintosh, *Prairie Settlement: The Geographical Setting*, pp. xi-xii. See also Morton and Martin, *History of Prairie Settlement and "Dominion Lands" Policy*, part I, chaps. iv-vii.

By 1900 the emphasis in settlement and in the mind of the prospective settler had shifted from considerations of "wood, water and hay" to land "ready for the plough".⁵ Encouraged by free homesteads and the possibility of securing an additional 160 acres in the form of a pre-emption or "purchased homestead" at an almost nominal price, immigrants were attracted in ever-increasing numbers so that by 1914 agricultural settlers had swarmed over most of the remaining park land and the whole of the plains area. In the decade from 1901 to 1911 both the number and the area of occupied farms had increased seven-fold while the area under

TABLE XI

NUMBER AND AREA OF FARMS AND ACREAGE UNDER CROPS IN SASKATCHEWAN, 1901-36*

Year	No. of farms	Area of occupied farms (thousands of acres)	Average occupied area per farm (acres)	Area improved (thousands of acres)	Average improved area per farm (acres)	Area under field crops (thousands of acres)
1901....	13,445	3,833	285.1	1,123	83.5	656
1906....	55,971					3,271
1911....	95,013	28,099	295.7	11,872	125.0	9,137
1916....	104,006	36,801	353.8	19,632	188.8	13,973
1921....	119,451	44,023	368.5	25,037	209.6	17,822
1926....	117,781	45,945	390.1	27,714	235.3	19,559
1931....	136,472	55,673	407.9	33,549	245.8	22,126
1936....	142,391	56,904	399.6	33,632	236.2	21,967

*Compiled from preliminary returns of *Census of the Prairie Provinces, 1936*, and preceding censuses.

cultivation had increased ten-fold (table xi). The much larger proportional increase in the area under field crops over the same period was significant in indicating the essential characteristics of prairie agriculture and the shift in agricultural production to an increased reliance on wheat and other cereals.

Expansion since 1914 has been less spectacular. Although the influx of new settlers was sharply reduced, the cultivation of new land was greatly stimulated by the war, so that while the number of occupied farms increased by only 25 per cent between 1911 and

⁵Murchie *et al.*, *Agricultural Progress on the Prairie Frontier*, p. 8.

1921 the occupied area increased 56 per cent and the cultivated acreage more than doubled. The post-war slump brought an actual decrease in the number of farms between 1921 and 1926 though there were slight increases in both occupied and improved acreages. The renewed expansion, evident between 1926 and 1931, came chiefly on the wooded soils of the northern fringe and for the first time since the opening of the century occupied acreage increased faster than cultivated acreage. Northern settlement received an additional stimulus from drought and depression between 1931 and 1936 but a net provincial increase of nearly 6,000 farms brought virtually no increase in the cultivated area. The smaller proportion of newly broken land and the necessity of summer fallowing approximately one-third of the cultivated land each year⁶ steadily reduced the ratio of field crop to cultivated acreage after 1911. In 1936, 60 per cent of the total occupied farm land was under cultivation of which roughly two-thirds was seeded to field crops.

Early in the century Saskatchewan took the lead in agricultural settlement and expansion in the Prairie Provinces from Manitoba. Alberta began to challenge that lead after 1926 and to show absolute gains over Saskatchewan in every index of agricultural expansion, but in 1936 Saskatchewan claimed not quite half the total number of farms in the Prairie Provinces, slightly more than half the area of occupied farm land, and over half the cultivated and field crop acreages.

Rapid exploitation made mistakes in land utilization inevitable. Regulation and control were foreign to the immigration and homestead policies of the Dominion government and to the spirit of the agrarian frontier. (Little was known of the relative adaptability of different soils to wheat production.) Between 1910 and 1920, encouraged by high prices for wheat, a favourable climatic cycle, and rapid construction of railways, the homesteader and his plough

⁶See William Allen, "Types of Farming in Canada" (*Scientific Agriculture*, vol. XIII, June, 1933, p. 621). "Many methods have been tried in an effort to replace the summerfallow. Intertilled crops have been grown, such as corn, sunflowers and potatoes. Grain has been seeded in rows of two or three drills and intertilled. Oats have been used for green feed. . . . The results of experiment have always shown the summerfallow to be superior to any summerfallow substitute" (E. S. Hopkins, "Cultural and Rotational Practices for Dry Land Agriculture", *ibid.*, vol. XVI, Nov., 1935, p. 125). See also S. Barnes and E. S. Hopkins, *Soil Moisture and Crop Production* (Ottawa, 1930).

made tremendous inroads upon the ranch economy of the south-west.⁷ Beginning in 1918 the natural aridity of the area became evident again, and, after the crash in wheat prices in 1920, continuation of the drought drove large numbers of farmers from the poorer lands. Abandonment never became as general or reached the proportions that it did in south-eastern Alberta but nearly half the farms were abandoned in some districts along the Saskatchewan side of the border.

The exodus was accompanied by a general movement of consolidation into larger holdings. Between 1921 and 1931 the poorer wooded soils of the north-east were also abandoned in part, though capital investment by individuals and by the community had generally been on a much smaller scale. Better crops and higher prices lured old settlers back and attracted new ones into the south-west after 1926 but the price collapse of 1930 followed by the complete crop failure of 1931 precipitated abandonment on a larger scale than any which had taken place before. Census figures on the number of abandoned farms suggest the heavy human and material losses of unwise settlement.⁸ The movement of thousands of families from the drought-stricken areas to the wooded soils of the north without adequate preliminary soil or economic surveys has increased these losses.⁹

2. THE ECONOMIC FARM UNIT AND LAND TENURE

The size of the average farm in the Prairie Provinces, and especially in Saskatchewan and Alberta, has always been large

⁷"In the five years between 1910-1915 no less than 860 miles of railway were built south of the South Saskatchewan. As an excuse for this there was the cry of those who had taken land far back from the railway, but the most potent influences were the desire of the Dominion Government to realize on its lands, the pressure of the land agents for the development of their districts, and the desire of the Canadian Pacific Railway to sell its lands. The settlers were the pawns in the game" (Morton and Martin, *History of Prairie Settlement and "Dominion Lands" Policy*, p. 144).

⁸The census of 1926 reported 4,907 abandoned farms in Saskatchewan; the census of 1931, 5,193; the census of 1936, 12,831. See *Census of the Prairie Provinces, 1926: Population and Agriculture* (Ottawa, 1931), p. 422; *Seventh Census of Canada, 1931. Census of Agriculture, Bulletin no. 1: Number of Occupied Farms by Counties or Census Divisions, 1931; and the Number of "Vacant" or "Abandoned" Farms, 1931* (Ottawa, 1932), p. 7; and *Census Press Bulletins*, nos. V and XI (*Preliminary Announcement of Census of Agriculture of the Prairie Provinces, 1936*, Ottawa, mimeo.).

⁹See below, chap. viii, for a discussion of northern settlement since 1930.

compared with farm units in other provinces of the Dominion or in most other countries. Moreover, every census from 1901 to 1931 showed an increase in the size of Saskatchewan farms accompanied by an even more substantial increase in the cultivated area per farm (see table XI). The average Saskatchewan farm of 400 acres in 1936 compared with 404 acres for Alberta and 271 for Manitoba, while the cultivated area per farm in Saskatchewan (236 acres) was 30 per cent greater than in Alberta.¹⁰ (In Saskatchewan, as in Alberta, an abundant supply of cheap land well adapted to cereal production, combined with a definite scarcity of labour throughout the period of settlement, stimulated extensive, rather than intensive, cultivation with the aid of large-scale labour-saving machinery.) Improvements in farm implements and more particularly in farm tractors, together with the introduction of the combined harvester thresher and the grain truck, brought about a considerable mechanization of grain growing between 1920 and 1930 which could be utilized to the best advantage only on the larger farms.¹¹ In those districts of the south-west where abandonment has been heaviest, the trend toward larger farms has been most pronounced though it has been marked over nearly all the plains area. In view of the obvious advantages of the larger farm unit it is probable that the trend toward larger farms will continue in the prairie regions.

The size of the average farm unit is reflected in the relatively large investment per farm and the importance of land values in that investment at all times, regardless of high or low prices for wheat (table XII), while the changes in the distribution of farm investment among the factors of production since 1901 (table XIII) illustrate the trend from livestock and livestock products towards cereals and power farming. The average investment represented by a farm was given as \$9,325 in the census of 1931, which was higher than in any other province in the Dominion. Land values were credited with 60 per cent of the value of Saskatchewan farm property. The investments in farm implements and machinery (\$185,000,000),

¹⁰Information from O. A. Lemieux, Dominion Bureau of Statistics, Ottawa, Aug., 1937.

¹¹See E. G. Grest, *An Economic Analysis of Farm Power in Alberta and Saskatchewan* (Ottawa, 1936); A. Stewart, *The Economy of Machine Production in Agriculture* (Montreal, 1931); and M. L. Wilson, "Research Studies in the Economics of Large Scale Farming in Montana" (*Agricultural Engineering*, vol. X, Jan., 1929, pp. 3-12).

the value of farm implements per farm (\$1,359), and the proportion of total farm capital invested in them, were all considerably greater than in any other province, though the value of machinery per acre of improved land in Saskatchewan (\$5.53) was far less than in any other province. Building has probably been more expensive in Saskatchewan than in any other province but less than 18 per cent of the total farm investment was represented by buildings in contrast with nearly half as much again for the Dominion. Live-stock in Saskatchewan made up a smaller proportion of the agricultural investment than in any other province though the value

TABLE XII

AVERAGE VALUE OF FARM PROPERTY PER FARM AND PER ACRE IN SASKATCHEWAN, 1901-36*

Year	TOTAL		LAND		BUILDINGS		MACHINERY		LIVESTOCK	
	Per farm	Per acre	Per farm	Per acre	Per farm	Per acre	Per farm	Per acre	Per farm	Per acre
1901	\$3,307	\$11.60	\$1,702	\$5.97	\$385	\$1.35	\$289	\$1.01	\$931	\$3.27
1911	8,766	29.64	6,140	20.76	802	2.71	606	2.05	1,218	4.12
1916	10,603	29.97	6,922	19.56	975	2.76	855	2.42	1,851	5.23
1921	13,814	37.48	8,878	24.09	1,812	4.92	1,479	4.01	1,645	4.46
1926	11,405	29.24	6,951	17.82	1,825	4.68	1,439	3.69	1,190	3.05
1931	9,325	22.86	5,608	13.75	1,640	4.02	1,359	3.33	718	1.76
1936	7,185	17.98	4,324	10.82	1,279	3.20	920	2.30	662	1.66

*Compiled from preliminary returns of *Census of the Prairie Provinces, 1936*, and preceding censuses.

TABLE XIII

VALUE OF FARM PROPERTY IN SASKATCHEWAN, 1901-36*

Year	No. of farms	Total value (in millions \$)	Land (per cent)	Buildings (per cent)	Machinery (per cent)	Livestock (per cent)
1901...	13,445	44.5	51.5	11.6	8.7	28.2
1911...	95,013	832.8	70.0	9.2	6.9	13.9
1916...	104,006	1,102.8	65.3	9.2	8.0	17.5
1921...	119,451	1,650.1	64.3	13.1	10.7	11.9
1926...	117,781	1,343.4	61.0	16.0	12.6	10.4
1931...	136,472	1,272.7	60.1	17.6	14.6	7.7
1936...	142,391	1,023.2	60.2	17.8	12.8	9.2

*Compiled from preliminary returns of *Census of the Prairie Provinces, 1936*, and preceding censuses.

of livestock per farm (\$718) was much higher than for farms in the Maritimes or British Columbia and only \$100 less than in Manitoba or Alberta.¹²

TABLE XIV

TRACTORS, COMBINES, MOTOR TRUCKS, AND AUTOMOBILES ON FARMS IN THE PRAIRIE PROVINCES AND CANADA, 1921-36*

	Manitoba	Saskatch- ewan	Alberta	Prairie Provinces	Canada
Tractors 1921	10,027	19,243	9,215	38,485	47,455
1926	12,151	26,674	11,311	50,136	
1931	14,366	43,308	23,985	81,659	105,360
1936	14,685	42,051	24,913	81,649	
Combines 1931	355	6,019	2,523	8,897	8,917
1936	498	6,413	2,909	9,820	
Motor trucks . 1926	952	3,267	1,421	5,640	
1931	3,260	10,938	7,319	21,517	48,401
1936	3,299	10,338	7,657	21,294	
Automobiles . 1921†	16,645	36,098	20,616	73,359	157,022
1926	20,208	52,177	29,144	101,529	
1931	25,588	65,094	42,817	133,499	321,284
1936	22,980	54,469	32,222	116,671	

*Compiled from preliminary returns of *Census of the Prairie Provinces, 1936*, and preceding censuses.

†Motor trucks were included with automobiles in 1921.

(The rapid growth in the use of power-driven machinery on western farms in the twenties is illustrated by table xiv.) Saskatchewan in 1931 had 31.7 tractors per 100 farms as compared with Alberta, 24.6; Manitoba, 26.5; and 14.4 for the whole Dominion. (A limited number of Saskatchewan farms are operated entirely by mechanical power, but, generally, most of the cultiva-

¹²See *Seventh Census of Canada, 1931. Census of Agriculture, Final Bulletin no. XIX: Tenure, Farm Values, Farm Facilities and Mortgage Debt, 1931 and Farm Expenses for 1930 by Counties or Census Divisions* (Ottawa, 1933), p. 4. The total value of all farm property in Canada in 1931 was estimated at \$5,247,753,000 to which Ontario contributed \$1,397,666,000 and Saskatchewan \$1,272,633,000; the Saskatchewan figures exceeded Quebec and Alberta by about \$400,000,000 in each case, Manitoba by nearly \$900,000,000, the Maritimes by \$1,000,000,000, and British Columbia by \$1,100,000,000.

tion is still done with horses and "there is no final answer to the question of whether tractor power is cheaper than horse power".¹³ Tractors are most common in the territory stretching west from Swift Current to the Alberta border and north to Kindersley where 40 per cent of farms reported ownership in 1931. They are used much less extensively in the park belt and the more newly developed areas of the north. The lowest figure for the province, 16.5 per cent, was reported by the Yorkton division where a very high proportion of the farm operators are of South, Eastern, and Central European extraction. The variation in the extent to which combines were utilized is evident in the number of farms reporting ownership, ranging from 17.2 per cent in the Swift Current division to 0.2 per cent around Yorkton.¹⁴ In addition to combines there was a relatively large threshing outfit for every five farms in the province in 1931.

The extent to which horses have been displaced by motor trucks for haulage purposes on the larger wheat farms since 1921 cannot be accurately computed since farm trucks were included with automobiles in the census of 1921, but this in itself shows their relative insignificance at that date. In 1931 Saskatchewan reported 8 motor trucks for every 100 farms, and was exceeded only by British Columbia with 15; the Dominion having 6.6. The incidence of ownership throughout Saskatchewan was much the same as that of tractors; in the Swift Current territory 17.4 per cent of farms reported trucks and in the Yorkton territory less than 1 per cent.

Although there has been a sharp decline in tractor sales¹⁵ in the Prairie Provinces since 1930, and especially in Saskatchewan, where the 1936 census (see table XIV) showed clearly that such sales had been insufficient to cover replacement needs owing to the farmers' inability to make new purchases, the depression has probably done

¹³Andrew Stewart, "Trends in Farm Power and their Influence on Agricultural Development" (Murchie *et al.*, *Agricultural Progress on the Prairie Frontier*, appendix A, p. 315).

¹⁴"The use of the combine in the three prairie provinces has increased almost beyond practical bounds since 1924. . . . In many instances the purchase of the combine was made without much consideration of the topography of the land or the nature of the maturity of the crop" (E. A. Hardy, "The Combine Harvester in Western Canada", *Scientific Agriculture*, vol. XII, Nov., 1931, p. 122).

¹⁵For tractor sales in each of the Prairie Provinces for the years 1920-36 inclusive, see *A Submission by the Government of Saskatchewan to the Royal Commission on Dominion-Provincial Relations (Canada, 1937)* (Regina, 1937), p. 143.

little to reverse the trend towards mechanization, particularly with a normal slowing down of the process. During 1930-1 the cost of major field operations with tractors was less than with horses on the larger prairie wheat farms, but with low grain prices in 1932-3 horses could do practically all types of field work cheaper than tractors.¹⁶ However, mortality among horses was high in the dried-out areas and costs of replacement and of feed and fodder (which would often have had to be imported from outside the province) were usually greater than the cost of operating a tractor. Economies, though of a doubtful nature, were effected chiefly by reducing cultivation to the minimum required for the planting and harvesting of a crop.

(Despite the steady advance in mechanization and in acreage under cultivation, the average farm in Saskatchewan has remained a family business.) The number of persons gainfully employed per farm has shown a very slight increase over a thirty-year period, namely from 1.4 in 1901 to 1.5 in 1931, and in the latter year was lower than in any other area except the Maritime Provinces.¹⁷ There were 184,000 family workers on Saskatchewan farms in 1931 and less than 12,000 full-time employees. Hired labour of every kind accounted for eleven weeks per farm.¹⁸ Less than 42 per cent of the farms reported any hired labour. Hirings for from six to eight months are much more common than hirings by the year and reflect the seasonal nature of wheat growing. The peak of the labour load comes in August and September when additional help is required for the harvest on most farms in a normal year.¹⁹ After paid labour is taken into account, about 85 per cent of all farm labour is contributed by the farm family.²⁰

¹⁶Grest, *An Economic Analysis of Farm Power in Alberta and Saskatchewan*, p. 67.

¹⁷See O. A. Lemieux, "Canadian Census Records of Farm Implements and Machinery" (*C.S.T.A. Review*, no. 4, March, 1935, p. 180).

¹⁸Information from O. A. Lemieux, Dominion Bureau of Statistics, Ottawa, Dec., 1935. See also J. E. Lattimer, "Production per Man" (*Scientific Agriculture*, vol. X, Oct., 1929, pp. 36-48), "Some Results of the Post-war Depression on Farm Organization in Canada" (*ibid.*, vol. XI, Nov., 1930, pp. 137-49), "The Economic Aspects of the Agricultural Problem" (*Papers and Proceedings of the Canadian Political Science Association*, vol. III, 1931, pp. 135-44).

¹⁹See G. V. Haythorne, "Harvest Labour in Western Canada: An Episode in Economic Planning" (*Quarterly Journal of Economics*, vol. XLVII, May, 1933, pp. 533-44).

²⁰See also Murchie *et al.*, *Agricultural Progress on the Prairie Frontier*, pp. 216, 231, and 277.

The typical prairie farm differs from the typical park belt farm and the latter in turn differs from the homestead of the wooded zone. (Soil zones and climate have a direct effect on the size of farm.) The size of the "average" farm in census division no. 4 in the extreme south-west was 732 acres in 1936 and in census division no. 14 in the extreme north-east, 232 acres.²¹ [The prairie farm with emphasis on production of wheat and large-scale machinery and mechanical power tends to be much larger than the more diversified farm of the park belt, while the smallest farm units, materially reducing the provincial "average", are to be found in the subsistence homesteads along the northern fringe of settlement.] Though smaller and larger farms are to be found in almost every community on the prairie plains, the section, or 640-acre farm, is a common unit of production. The average investment per farm will vary greatly from district to district,²² and machinery values will be far above the provincial average. - (The big cash crop will be wheat; a few cows, pigs, and chickens will normally be kept and a garden cultivated to provide the farm family with a large part of its food requirements.) In the park belt, where conditions for the production of wheat are less favourable than on the plains but where a much more diversified agriculture is possible, there is less expensive equipment, variations in the size of farms tend to be somewhat less marked, and the half-section or 320-acre unit is most frequently encountered. On the fringe, where the clearing of wooded soils proceeds slowly, the homesteader's quarter-section is the typical holding and capital investment is slight.

(A very high proportion of owners to tenants among farm operators is characteristic of the early stages of settlement in a new country.) (But the free land period comes only once in the history of any country and those who come too late to homestead must purchase or rent if they wish to operate on the better land.) Many, including the younger sons of farmers, will find it either

²¹See *Quinquennial Census of Saskatchewan, 1936, Bulletin no. XXV: Preliminary Report on Agriculture* (Ottawa, 1937), pp. 6-9.

²²On the Saskatchewan plains the average value of farm property per farm was reported as follows: Swift Current, 1928 (96 farms), \$52,685; Belbeck, 1926 (119 farms), \$34,368; Davidson, 1930 (135 farms), \$24,922; Kindersley, 1930 (218 farms), \$20,385. For the park belt average values were: Melfort, 1926 (106 farms), \$24,643; Alameda, 1928 (100 farms), \$18,847; Turtleford, 1930 (182 farms), \$12,848 (Murchie *et al.*, *Agricultural Progress on the Prairie Frontier*, p. 71).

necessary or desirable to rent for a number of years before buying. (The trend toward higher capitalization of farm property brought about by rising land values and by the steady increase in the size of the economic farm unit, the latter requiring, as it does, not only a larger acreage but also larger and more expensive operating equipment, adds to the difficulties of the prospective purchaser and makes for an increase in tenancy.) Falling prices wipe out the equity of the farmer who has bought land and equipment during a period of rising prices, foreclosure follows, and he reverts to the status of a tenant.) These factors were in evidence in an increase in tenancy during the period from 1911 to 1921, but the most

TABLE XV
LAND TENURE IN SASKATCHEWAN, 1901-36*
(Percentage of Owners and Tenants)

Year	FARMS			LAND	
	Owners	Tenants	Owner-tenants	Owned	Rented
1901.....	96.1	1.6	2.3	96.1	3.9
1911.....	90.6	3.7	5.7	91.0	9.0
1916.....	82.5	6.4	11.1	84.1	15.9
1921.....	77.6	10.8	11.6	80.5	19.5
1926.....	66.2	16.7	17.1	70.8	29.2
1931.....	66.5	15.4	18.1	70.5	29.5
1936.....	60.7	20.4	18.9	65.2	34.8

*Compiled from preliminary returns of *Census of the Prairie Provinces, 1936*, and preceding censuses.

marked increase took place during the post-war depression (see table xv). The short period of relative prosperity after 1925 effectively halted the trend toward tenancy but recent years of depression and drought have produced a further sharp increase.

(Tenancy tends to be highest on the choicest land of well-established districts, and, in general, is most common in the south-east and south-central parts of Saskatchewan while ownership is most obvious in the northern and more newly developed areas. Tenancy is highest on the good soils of the Regina plains where as early as 1926 in one rural municipality one-third of the farmers owned all their land and over half the farms were operated by

tenants.²³ On the other hand, ownership is highest on the poorer soil types of the south-west, on the less desirable wooded soils of the north where settlement has continued, and on the better land of the Carrot River Valley much of which has been acquired by homestead since the war.

(A very small proportion of tenants pay a cash rent and at least 85 per cent of all tenants in Saskatchewan rent on a crop-share basis.) Leases for more than five years are unusual—the most common crop-share lease being for three years and providing that the tenant may retain two-thirds of the crop out of which he will meet all costs of operation except taxes, the remaining third to be handed over to the landlord as rent and for the payment of taxes. If the landlord supplies part of the costs of operation or provides equipment, he receives a larger proportion of the crop. (Share tenancy has commonly been regarded as a primitive form of tenancy but in the Prairie Provinces its continuance must be attributed, in large part, to an adaptation of institutions to the climatic and income variability of the region.²⁴)

Saskatchewan has a large number of partly owned, partly rented farms (table xv).²⁵ (Many of the most successful and enterprising farmers own the larger part of their farms but by renting additional acreage from less successful neighbours and institutional holders are able to effect greater economies in large-scale operation.) Such tenancy, with a short-term lease on a crop-share basis, tends to bring an element of flexibility into farm operation, though frequently it is a step toward ultimate ownership.

²³See *Census of the Prairie Provinces, 1926*, pp. 442-3.

²⁴"Share rents fluctuate with the changes in the price of the crops . . . and in the area . . . of less productive soil, the smaller gross returns were offset by a lower rent for the land" (G. H. Craig, "Land Settlement and Tenancy in the Lomond and Vulcan Districts, Alberta", *Economic Annalist*, vol. VII, April, 1937, pp. 22-3). On the better soils of the Vulcan district 53 per cent of the 150 rental contracts studied were for one-third share of the crop, 30 per cent for one-half, 14 per cent for one-quarter, and none was on a cash rental basis. On the poorer soils of the Lomond district 45 per cent of 201 rental contracts were for one-quarter of the crop, 22 per cent for one-fifth, 16 per cent for one-half, 10 per cent for one-third, and one contract on a cash basis.

²⁵Both the number of such farms and the proportion of rented to owned land are increased by the fact that most ranching units are composed of a small acreage of pasture owned and a much larger acreage leased from the government. See *Seventh Census of Canada, 1931. Census of Agriculture, Final Bulletin no. XIX*, p. 3.

This class of farm is larger than either wholly owned or wholly rented farms and indicates the drive of mechanization toward larger farm units. The average area of the partly owned, partly rented farm in 1936, namely 690 acres, was more than twice the area of the owned farm (320 acres) and nearly 75 per cent larger than the average farm operated by a tenant (403 acres).

The relationship between tenure and the racial origin of farm operators is more difficult to isolate but business ability and greater financial resources have made American and British immigrants prefer the prairies and large-scale commercial farming, while South, Eastern, and Central Europeans have preferred the park belt with its more diversified agriculture and smaller farms. Land ownership may exercise a greater attraction for certain European groups.

More of the Continental European settlers own their own farms than of either the native born or immigrants from the United States and Great Britain. . . . When the total farm acreage operated by the several nativity groups is classified according to type of tenancy, it becomes increasingly clear that the European in Western Canada is not at least as yet, a tenant farmer. He is pre-eminently the owner-operator of the Canadian West. The United States immigrants are at the opposite extreme. As few as 58 per cent are pure owners in Saskatchewan and only 61 per cent in Alberta where, as has been pointed out, these immigrants constitute about one quarter of all farm operators. On the other hand, between 38 and 40 per cent of the farm operators of United States origin in these two provinces are either pure tenants or part owner and part tenants and 35 per cent in Manitoba. Geographical, financial and probably cultural causes contribute to these differences.²⁶

A new type of tenancy appears to be emerging in the farm management operations of such mortgage company organizations as the Colonization Finance Corporation of Canada,²⁷ but it is too early as yet to estimate the significance of the movement.

²⁶*Agriculture, Climate and Population of the Prairie Provinces of Canada: A Statistical Atlas showing Past Development and Present Conditions*, prepared under the direction of W. B. Hurd and T. W. Grindley (Ottawa, 1931), p. 85. "The proportion of rented farms in this area was fairly small [11 per cent] due in part to the relatively lower values placed on these lands, and to the great desire of people from Continental Europe to own their farms" (*Studies of Farm Indebtedness and Financial Progress of Saskatchewan Farmers. Report no. 4: Survey made in the Humboldt District in 1934*, contributed by the Department of Farm Management, University of Saskatchewan, Saskatoon, College of Agriculture, Bulletin no. 71, 1936, p. 11).

²⁷See F. W. Reinoehl, "Farm Management Programme of the Colonization Finance Corporation" (*Scientific Agriculture*, vol. XIII, April, 1933, pp. 481-8).

3. PRODUCTION TRENDS IN THE WHEAT ECONOMY

The size and tenure of farms are related to land utilization, and a significantly higher proportion of the field crop acreage of Saskatchewan is devoted to wheat than in any other province. Mixed farming, dairying (usually associated with wheat growing and determined by proximity to the larger urban centres), and ranching, are important, but the production of wheat is the major concern of more than 80 per cent of Saskatchewan farmers (see figure IV). Two-thirds of the land annually seeded to field crops is devoted to the production of wheat, and of the remaining one-third, oats, grown by the farmer almost exclusively for the feeding of his livestock (that is for use on the farm), claim by far the larger part, leaving less than 10 per cent of the total acreage for the growing of barley, rye, and flax. Over a large part of the prairie plains the proportion of wheat to all other field crops rises to more than 80 per cent and in the drier areas to over 90 per cent. (Intense specialization in wheat relative to other grains on the semi-arid plains is a result of the great drought-resisting capacity of wheat and the extremely high quality of the wheat produced.) Ranching is a competitor with wheat in the drier areas of the plains region but diversification, or mixed farming, necessitating extensive production of forage crops, is generally negligible.²⁸

Wheat acreage expanded rapidly from the opening of the century until 1921 but has since remained relatively stable (table XVI). (Drought has been the chief cause of the wide variations in yield per acre and in total production.) For twenty years Saskatchewan

²⁸"It is frequently forgotten that the development of drought-resistant types of wheat enables this cereal to grow and bring profitable yields under conditions of moisture that would make mixed farming impossible. This is a fact of the very greatest importance" (D. A. MacGibbon, "The Future of the Canadian Export Trade in Wheat", *Contributions to Canadian Economics*, vol. V, 1932, p. 8). For comparative yields of wheat and forage crops at Swift Current Dominion Experimental Station, see S. Barnes, "Economic Aspects of Drought Resistance" (*Scientific Agriculture*, vol. XII, Dec., 1931, pp. 206-8). See also J. B. Harrington, "Cereal Crop Improvement for Dry Farming Conditions" (*ibid.*, vol. XVI, Nov., 1935, pp. 113-20); E. S. Hopkins, "Cultural and Rotational Practices for Dry Land Agriculture" (*ibid.*, pp. 121-6); H. J. Kemp and H. A. Purdy, "Suitable Cereals for Dry Land Farming on the Prairies" (*ibid.*, pp. 135-40); J. G. Taggart, "The Maintenance of Dry Land Farming on the Southern Prairies" (*C.S.T.A. Review*, Sept., 1935, pp. 335-6); *Guide to Saskatchewan Agriculture* (Saskatoon, Agricultural Extension Department, University of Saskatchewan, 1936), p. 30.

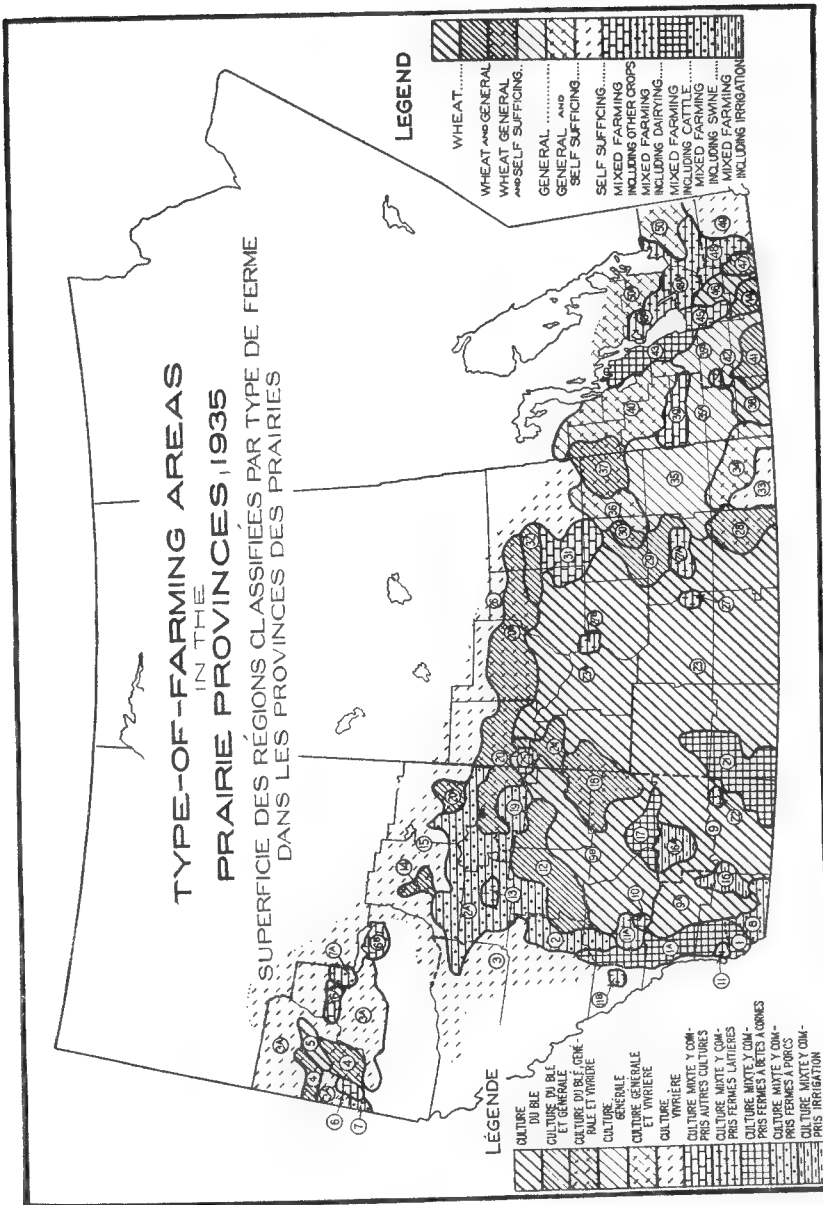


FIGURE IV

From Dominion Bureau of Statistics, *Census of Prairie Provinces, 1936: Types of Farming* (Ottawa, 1938).

has possessed more than half the total Canadian wheat acreage, and over most of that period the Prairie Provinces have contributed

TABLE XVI

AREA, YIELD, AND PRODUCTION OF WHEAT IN SASKATCHEWAN AND IN THE THREE PRAIRIE PROVINCES, 1900-38*

Year	SASKATCHEWAN			PRAIRIE PROVINCES		
	Area (thousands of acres)	Average yield (bushels)	Total production (thousands of bushels)	Area (thousands of acres)	Average yield (bushels)	Total production (thousands of bushels)
1900.....	487	8.8	4,306	2,495	9.4	23,457
1905.....	1,376	23.1	31,799	3,941	21.2	83,550
1906.....	2,117			5,062		
1908.....	2,396	14.5	34,742	5,624	16.3	91,855
1909.....	3,685	23.1	85,197	6,878	21.4	147,482
1910.....	4,228	15.8	66,979	7,867	14.0	110,167
1911.....	5,256	20.8	109,323	9,990	20.9	208,697
1912.....	5,582	19.2	106,960	10,011	20.4	204,280
1913.....	5,720	21.3	121,559	10,036	20.9	209,262
1914.....	5,348	13.7	73,494	9,335	15.1	140,958
1915.....	8,929	25.1	224,312	13,868	26.0	360,187
1916.....	9,032	16.3	147,559	14,363	16.9	242,314
1917.....	8,273	14.3	117,921	13,619	15.6	211,953
1918.....	9,249	10.0	92,493	16,125	10.2	164,436
1919.....	10,587	8.5	89,994	17,750	9.3	165,544
1920.....	10,061	11.3	113,135	16,841	13.9	234,138
1921.....	13,557	13.8	188,000	22,181	12.6	280,098
1922.....	12,332	20.3	250,167	21,223	17.7	375,194
1923.....	12,791	21.3	271,622	20,880	21.7	452,260
1924.....	13,033	10.2	132,918 ^x	21,066	11.2	235,694
1925.....	12,509	18.8	235,472	19,760	18.6	367,058
1926.....	13,558	16.2	219,646 ^x	21,805	17.5	380,765
1927.....	12,979	19.5	252,500 [✓]	21,426	21.2	454,559
1928.....	13,791	23.3	321,215 ^x	23,158	23.5	544,598
1929.....	14,445	11.1	160,565 [✓]	24,297	11.6	281,664
1930.....	14,714	14.0	206,700 ^x	24,807	16.0	397,300
1931.....	15,026	8.8	132,466 ^x	25,586	11.8	301,181
1932.....	15,543	13.6	211,551 [✓]	26,395	16.0	422,947 [✓]
1933.....	14,743	8.7	128,004 ^x	25,177	10.4	263,004
1934.....	13,262	8.6	114,200 [✓]	23,296	11.3	263,800
1935.....	13,206	10.8	142,198 ^x	23,293	11.3	264,098
1936.....	14,744	7.5	110,000	24,837	8.1	202,000
1937.....	13,893	2.7	37,000 ^x	24,599	6.5	159,000
1938.....	13,793	9.6	132,000	24,946	13.0	326,000

*Information from Agricultural Branch, Dominion Bureau of Statistics.

approximately 96 per cent of the Dominion acreage. In the last fifteen years Saskatchewan has accounted for roughly 60 per cent, Alberta 30 per cent, and Manitoba 10 per cent of the total western wheat acreage. Since Saskatchewan has shown the greatest variation in yield per acre, her contributions to total wheat production have varied greatly, and over the ten-year period 1929-38 she has failed to average one-half of the Canadian production, or even one-half of her own peak production of 1928. (This has been largely due to the prolonged drought in the southern part of the province, where the bulk of the wheat acreage is concentrated.) In 1931 the returns for the four large southern crop districts ranged from 1.8 to 5.7 bushels per acre while in the Carrot River Valley and the North Battleford area yields of 23 bushels to the acre were harvested.²⁹ There was a general improvement in the south in 1932 but yields remained below the long-run average.

In 1933, Saskatchewan produced . . . the smallest crop reported since 1920, and equalled the lowest yield per acre on record, that of the failure of 1919. On the prairie plains, from 8.9 million acres of wheat, 60 per cent of the total wheat acreage of the province, only 37 million bushels were harvested, averaging 4.1 bushels per acre, whereas in the park belt, from 5.8 million acres, 88 million bushels were obtained, averaging 15.2 bushels per acre. Deprived of revenues, even from low priced wheat, the season of 1933 gave another staggering blow to the prairie wheat farmers.³⁰

In 1934 production fell off still further:

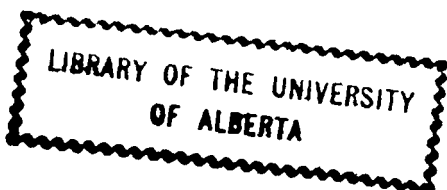
The four southern crop districts, which contain about one-half of the total wheat acreage of Saskatchewan produced only one-quarter of the total wheat crop. In these districts, the average yield of wheat was down to 4 bushels per acre. For many districts harvests were too poor to return seed, and failures of forage crops and gardens were also experienced. Farmers in the northern and the east central crop districts, where park belt conditions prevail, had satisfactory yields generally despite local frost damage, and from about one-fifth of the provincial wheat acreage obtained one-half of the total Saskatchewan wheat crop.³¹

In 1935 confident anticipations, following a break in the drought, of at least average wheat yields were shattered when rust invaded the province from the east, drought from the west, and frost from

²⁹See *Annual Report of the Secretary of Statistics, 1934, Department of Agriculture, Saskatchewan* (Regina, 1935), p. 94.

³⁰William Allen and E. C. Hope, *The Farm Outlook for Saskatchewan, 1934* (Saskatoon, 1934), p. 2.

³¹*Ibid.*, 1935 (Saskatoon, 1935), p. 2.



the north. The extremely severe epidemic of wheat-stem rust completely destroyed nearly one-quarter of the total wheat acreage and materially reduced both the quality and quantity of much of the remaining crop. In 1936 the excellent crop prospects of June were converted by heat and drought into another failure and the lowest wheat yield on record. (In 1937, drought brought the most complete crop failure in the history of settlement over the entire prairie wheat belt.) In 1938 the prairie plains received abundant rains during the early part of the growing season and the drought area shifted to the north central section of the province. Later in the season insufficient moisture supplies brought deterioration of crops on the lighter soils of the south-west, while heavy damage from both rust and grasshoppers resulted in low yields over most of the large south-eastern, south-central, and central crop districts.³²

(Wheat acreage in Saskatchewan reached a peak in 1932, declined sharply with drought and extremely low prices, rose again with improved prospects in 1936 but fell in 1937 and 1938 after further severe crop failures.) Reductions in acreage have been evident in each of the nine provincial crop districts but restriction has been greatest in the south-western and south-central crop districts with consequent abandonment of farms.

More than one-third of the oat acreage of the Dominion and rather more than one-half of the oat acreage of the Prairie Provinces is situated in Saskatchewan. Oat production reached its maximum after the war (table xvii) but declined through the twenties as the horse gave way to the tractor. (The increased acreages of the last few years have been largely a result of the reduced supplies brought about by repeated crop failures on the prairies.) Though nearly every farm has a certain proportion of its crop area devoted to oats, production is relatively most important on the farms of the park belt and the forest areas where conditions for wheat production are less favourable. Oats occupy a very small proportion of field crop land in the south-west. They are particularly sensitive to drought conditions and in the drought areas during 1931, 1933, 1934, 1936, and 1937 the average yield of oats per acre was considerably below the average yield of wheat.³³

³²For a discussion of the values of Saskatchewan wheat crops and the course of wheat prices, see below chap. v, sec. 1.

³³See Harrington, "Cereal Crop Improvements for Dry Farming Conditions"; and *Annual Report of the Secretary of Statistics, 1938, Department of Agriculture, Saskatchewan*, pp. 53-9.

TABLE XVII

AREA AND PRODUCTION OF COARSE GRAINS AND FLAX SEED IN SASKATCHEWAN,
1900-38
(in thousands)

Year	OATS		BARLEY		RYE		FLAX SEED	
	Acreage	Total bushels	Acreage	Total bushels	Acreage	Total bushels	Acreage	Total bushels
1900.....	142	2,270	12	187	1	12		
1905.....	606	25,624	41	1,196	1	20	36	487
1906.....	902		78		3		199	
1908.....	930	29,205	81	1,952	3	41	110	1,144
1909.....	1,847	91,796	135	4,493	3	38	110	1,787
1910.....	1,888	58,923	130	3,061	1	12	506	3,893
1911.....	2,333	107,542	274	8,658	2	61	1,154	13,039
1912.....	2,556	117,537	292	9,595	3	57	1,780	23,033
1913.....	2,755	114,112	332	10,421	3	68	1,386	15,579
1914.....	2,520	61,816	290	4,901	3	54	958	6,131
1915.....	3,336	145,066	300	9,523	7	203	395	5,255
1916.....	3,792	163,278	367	9,916	23	548	542	6,692
1917.....	4,522	123,214	670	14,068	53	998	754	4,711
1918.....	4,988	107,253	699	11,888	123	1,420	841	4,205
1919.....	4,838	112,157	493	8,971	190	2,000	930	4,490
1920.....	5,107	141,549	519	10,501	172	2,535	1,141	5,705
1921.....	5,682	170,513	498	13,343	1,208	13,546	427	3,230
1922.....	5,098	179,708	636	18,511	901	16,164	466	4,079
1923.....	4,899	218,075	640	19,278	569	8,582	466	5,494
1924.....	4,942	97,345	954	17,360	178	2,507	927	6,119
1925.....	3,752	102,297	858	18,105	191	2,850	692	4,870
1926.....	3,921	110,193	872	21,891	307	5,454	520	3,744
1927.....	4,413	142,526	926	27,129	358	8,561	331	3,373
1928.....	4,359	156,043	1,621	44,266	471	8,412	279	2,654
1929.....	4,256	68,944	2,229	30,755	642	8,301	298	1,462
1930.....	4,531	125,509	2,016	40,522	1,010	14,875	431	3,900
1931.....	4,295	67,700	1,375	14,340	528	2,396	509	1,820
1932.....	4,365	107,400	1,329	23,400	482	5,190	381	2,200
1933.....	4,571	75,422	1,228	17,560	305	1,777	205	410
1934.....	4,625	64,288	1,088	12,403	346	1,320	175	542
1935.....	4,942	131,951	1,146	23,149	374	4,967	260	1,250
1936.....	4,684	65,462	1,302	16,627	336	1,489	366	1,240
1937.....	4,380	22,338	1,174	5,518	518	635	175	123
1938.....	4,171	90,000	1,207	20,000	292	3,400	139	725

*Information from Agricultural Branch, Dominion Bureau of Statistics.

Barley is particularly adapted to the conditions of the Prairie Provinces. It is an early maturing cereal and suited to areas menaced by early fall frosts. It can be planted late, and is of particular advantage where weeds are to be killed in early spring. Barley will yield well on land too heavily infested with weeds to grow wheat or oats. (However, like oats, it is not as well suited as wheat to the climatic conditions of the prairie plains and makes an extremely poor showing in dry years) It is grown most extensively in the eastern and north-eastern park belt where farming is more diversified, and in such areas the improved demand for malting barley during the last ten years has encouraged production. Saskatchewan contains about one-third of the Canadian barley acreage, though the crop accounts for only 6 per cent of the total field crop acreage of the province. Manitoba is a more important producer.³⁴

Rye is much less important than barley in Saskatchewan though the province includes over half the Dominion rye acreage. It enjoyed a brief popularity in the post-war period (see table xvii) but neither yields nor prices have encouraged production. The greater part of the rye acreage is found on the lighter sandy soils of the south-west. At Maple Creek in 1931 more than 40 per cent of the cultivated acreage was in fall-sown rye grown in an attempt to prevent losses from soil drifting.³⁵

The production of flax seed is of slight importance. Nearly 80 per cent of the total Canadian flax acreage is situated in the province but the peak of flax seed production was reached in 1912 and both acreage and production have declined to low levels. The growing weed problem restricted production, as flax requires a clean seed-bed, and the gradual increase in the United States' duty between 1921 and 1930 narrowed the market. For several years Canada has imported nearly 1,000,000 bushels of flax seed annually.³⁶ A revival in building activity may be expected to increase demand and be followed by an increase in domestic production.

The area seeded to forage crops has been declining for several

³⁴See H. Barton *et al.*, "Barley in Canada" (*C.S.T.A. Review*, no. 11, Dec., 1936, pp. 91-154).

³⁵See also C. C. Spence, "Land Utilization in Southwest Central Saskatchewan" (*Economic Annalist*, vol. VI, Dec., 1936, pp. 84-8).

³⁶See *The Agricultural Situation and Outlook, 1938* (Ottawa, Departments of Agriculture and Trade and Commerce, 1937), p. 28, and *ibid.*, 1939, p. 26.

years under conditions of severe drought and in 1938 accounted for less than one per cent of the field crop acreage. Sweet clover, western rye grass, brome grass, and alfalfa have been the most important crops and have been grown chiefly in areas where a fair annual precipitation can usually be expected. Fodder corn is grown in the Maple Creek area in the south-west. Excellent work has been done in the development of new grasses and in the distribution of grass seed to farmers by the Forage Plants Division of the Dominion Department of Agriculture. Because of superior drought-resisting qualities, the recently developed crested wheat-grass is becoming more popular than the older varieties and is being used in the semi-arid section for permanent re-grassing to check soil-drifting, and for hay and pasture.³⁷

The space devoted to gardens and the cultivation of small fruits is increasing. Census statistics for 1926 (the latest figures available) showing only 62 per cent of Saskatchewan farms with gardens³⁸ lead one to suspect that many farmers, thinking their gardens of no commercial importance, did not report them, for one seldom sees a farm without a garden. Scanty precipitation makes it difficult to maintain gardens in the extreme south-west of the province but wherever and whenever rainfall is adequate a variety of vegetables and flowers can be grown. Much can also be done in the cultivation of small fruits, protected by tree belts or "wind-breaks". The acreage of small fruits was five times as great in 1931 as in 1921, and that of orchards fifty times as great.³⁹ The number and area of farm gardens have increased in recent years as financial stress has emphasized the value of this means of supplying an important part of the farm diet.⁴⁰ The potato acreage of the province increased from an average of 39,000 for the years 1925-9 to an average of 45,000 for the years 1930-4, and to over 50,000 in 1938.⁴¹

³⁷See "Forage Crops" (*Guide to Saskatchewan Agriculture*, pp. 29-34).

³⁸See *Census of the Prairie Provinces*, 1926, p. 417.

³⁹See *Seventh Census of Canada. Census of Agriculture, Final Bulletin no. XXV*, p. 31.

⁴⁰"For many years there has been an increasing tendency for farmers of the open plains area to keep cows and poultry, to grow gardens and small fruits, all with a view to providing a substantial part of the family living" (Taggart, "The Maintenance of Dry Land Farming on the Southern Prairies", p. 337).

⁴¹*Statistical Data Supplementary to the Agricultural Situation and Outlook, 1936* (Ottawa, Departments of Agriculture and Trade and Commerce, 1935), p. 54, and *Field Crops of Canada, 1938* (Ottawa, 1938, mimeo.).

The increase in livestock⁴² in Saskatchewan since the beginning of the century (table XVIII), though substantial, has been relatively limited. (The failure of livestock production to expand rapidly is a result of displacement of the ranching economy over the greater

TABLE XVIII
LIVESTOCK ON FARMS IN SASKATCHEWAN, 1901-38*
(in thousands)

Year	Horses and mules	Milch cows	Other cattle	Total cattle	Sheep	Swine	Poultry
1901.....	84,536	57	212	269	66	28	297
1906.....	241	113	360	473	121	124	
1911.....	507	181	452	633	114	286	3,393
1916.....	842	323	690	1,013	124	531	4,619
1921.....	1,084	415	881	1,296	195	420	7,857
1926.....	1,110	438	722	1,160	162	598	9,181
1931.....	1,000	480	709	1,189	281	949	11,519
1936.....	898	591	944	1,535	343	667	9,626
1937.....	874	564	877	1,441	345	454	8,825
1938.....	806	497	632	1,129	337	268	7,890

*Information from the Secretary of Statistics, Department of Agriculture, Regina.

part of the prairie plains, unfavourable conditions for diversified agriculture, and mechanization of wheat production. The number of horses in Saskatchewan increased up to 1924 but has been declining for the last fourteen years. Previous to 1933 Saskatchewan produced more horses than were required within the province, supplied replacement needs of Eastern Canada, and exported considerable numbers to the United States.⁴³ Increased mechanization

⁴²The number, or the value, of livestock in the province at any time is to a great extent a capital item and does not reveal the volume of production. It is impossible to show this accurately so that the most satisfactory comparison with grain-growing is through the values of production for grain and other farm products as given below in chap. v.

⁴³See Allen and Hope, *The Farm Outlook for Saskatchewan, 1934*, p. 7: "In 1931 there were 24,000 more farm tractors in Saskatchewan than in 1921. Assuming these to be 3 plow tractors, and accomplishing field work under average Saskatchewan farm conditions, this increase in tractors is equivalent to an increase of 240,000 work horses, which is about 30 per cent of the present number of work horses in the province. From 1921 to 1933 the horse population of Saskatchewan declined only 133,000 head. During this period the increase in acres of crop land amounted to a little over 4 million acres. If all the farm tractors now in Sas-

of agriculture in the twenties is reflected in the decline in percentage of farms owning horses from 91 per cent in 1921 to 82 per cent in 1931 and in the decrease for farms reporting such ownership from 9.9 to 8.9 head per farm.⁴⁴ Reduction since 1931 is a result in very large measure of lack of feed and fodder resulting from drought. In the dried-out areas the horse population decreased by nearly 30 per cent while the park belt showed an increase.⁴⁵

The number of dairy cows in Saskatchewan has tended to increase in about the same proportion as the population since 1900, though numbers have always tended to decline in periods of relative prosperity and to increase during depression. Seventy-two per cent of Saskatchewan farms reported dairy cows in 1931 as compared with 78 per cent in Ontario and 75 per cent in the Dominion. The number of farms reporting these animals is highest in the eastern and northern park belt and lowest in the semi-arid area of the south-west. Of the farms reporting in 1931, two-thirds reported one to four cows while only 3.5 per cent reported fifteen or more⁴⁶ which suggests that the average Saskatchewan farmer is chiefly concerned with obtaining an adequate supply of milk, cream, and butter for family use. For the prairie farmer especially, dairy production is a small sideline rather than a major division of farm operations; surplus milk is usually separated, and the cream shipped to the nearest creamery, the proceeds comprising a small but useful addition to the farm income in the form of ready cash.⁴⁷ Almost one-half of the farms reporting beef cattle had four or less animals per farm while only 10 per cent showed more than fifteen animals. A decline of nearly 20 per cent between 1921 and 1931 was a reflection of market conditions and of a retreat from diversification in sections of the plains area. The recent

katchewan were working as many days per year as they were in 1929, Saskatchewan would still have ample power for all farm work. There is probably more farm power available per crop acre in Saskatchewan now than there was in 1921."

⁴⁴See *Seventh Census of Canada, 1931. Census of Agriculture: Farms reporting Livestock by Kinds, Total Number of Animals Reported for Each Kind, Preliminary Report* (Ottawa, 1932), pp. 1-2.

⁴⁵See *Annual Reports of the Secretary of Statistics, Department of Agriculture, Saskatchewan, 1931-8*.

⁴⁶See *Preliminary Report on Farms reporting Livestock by Kinds*, pp. 2-3, 8-9.

⁴⁷See E. G. Misener, *An Economic Survey of the Dairy Industry in Saskatchewan* (Regina, 1930, mimeo.); and W. M. Drummond, "Problems of the Canadian Dairy Industry" (H. A. Innis et al., *The Dairy Industry in Canada*, Toronto, 1937, pp. 127-210).

increase in both dairy cows and other cattle, reversed abruptly by severe feed and fodder shortages in 1936 and 1937, has been most marked in the park belt.

Sheep are raised on about 5 per cent of Saskatchewan farms; the sheep population has been increasing steadily since 1924, and between 1930 and 1935 more than doubled. The number of sheep per farm reporting is more than double the Dominion average and in the south-west specialization has resulted in many large sheep ranches. The recent expansion has been most marked in the dried-out areas of the south-west which would seem to indicate that sheep are better adapted to scanty rainfall than most other farm enterprises.⁴⁸ While Ontario tends to maintain a place as centre of the sheep-raising industry in Canada, the Maritimes and Quebec are rapidly losing ground to the Prairie Provinces which accounted for about 40 per cent of all sheep in Canada in 1935, Saskatchewan claiming a little over one-third of the total.⁴⁹

Swine are kept on 60 per cent of Saskatchewan farms but the production cycle being a short one both the number of farms keeping swine and the average number kept per farm are subject to fairly wide variations. Production reached a peak in 1931 (see table XVIII) following the collapse in grain prices, but the domestic market was unable to absorb a surplus and hog prices fell so low in 1932 as to discourage producers. Feed shortages in many areas brought further liquidation in 1933-5 and 1937-8. Southern and Central European immigrants are more inclined toward hog production than British or American settlers, and swine are raised most extensively in the eastern and north-eastern park belt.

In 1931 more than three-quarters of all Saskatchewan farms kept an average of over 100 head of poultry; turkeys, geese, and ducks accounting for less than 10 per cent of the total. Poultry keeping is fairly well distributed since, as in the case of dairy cattle, the farmer keeps them chiefly for his own table and sells only the surplus production. Few farmers engage in poultry production

⁴⁸See L. E. Kindt, *An Economic Analysis of the Sheep Ranching Industry in Western Canada* (Ottawa, 1936), and "Capital Invested per Sheep Ranch in the Maple Creek and Great Sandhills Area of Southwestern Saskatchewan" (*Scientific Agriculture*, vol. XIV, Feb., 1934, pp. 336-7); W. H. Tisdale, "A National Sheep Policy" (*ibid.*, vol. XVI, Oct., 1935, pp. 57-66); and Allen and Hope, *The Farm Outlook for Saskatchewan, 1935*, p. 6.

⁴⁹See *Statistical Data Supplementary to the Agricultural Situation and Outlook, 1936*, p. 85.

PLATE III



Heavy soils of level to undulating topography have very little waste land and conserve the maximum amount of soil moisture.



A good water supply is indispensable to the cattle ranches of south-western Saskatchewan.



Areas of non-arable land provide good grazing for sheep. The above scene is on sandy land in south-western Saskatchewan.

as a major line of business and only one farm of every 200 reporting kept over 500 birds.⁶⁰

4. THE HAZARDS OF WHEAT PRODUCTION

The pioneer farmers of the West discovered that the problems of prairie agriculture could not be solved by the application of farming techniques imported from the British Isles or Ontario and found adaptations of agricultural techniques worked out in the western United States much more useful. Science and experiment have helped to reduce other hazards of cereal production but the wide swings in Saskatchewan wheat production over the last ten years are sufficient indication that the risks are still disconcertingly large.

The shortness of the growing season as a serious hazard was overcome by scientific research in the development of early ripening varieties of wheat. What Red Fife at the opening of the century, followed by a more significant advance in the introduction of Marquis by 1912, did for the prairie plains, Garnet and Reward went far toward doing for the park belt and parts of the northern forest region by 1929,⁶¹ though only oats can be grown with safety as yet along much of the northern fringe. (Fluctuations in the frost-free period from year to year have proved much more difficult. Spring frosts, though common, are seldom serious but late summer frosts in July and August strike the grain plant at a particularly critical stage and may cause a complete crop failure.) The danger is greatest in the northern sections where frost often impairs the quality of the grain, though sometimes, as in 1928, when nearly all the extraordinarily large Saskatchewan wheat crop was severely damaged by frost, the loss extends to the greater part of the province. In the territory around and north of Melfort, Prince Albert, North Battleford, and Lloydminster (see figure III), a late spring or an excessive summer precipitation frequently makes the grain late in ripening and results in its being caught by an early frost. Damage to gardens and small fruits through late spring, late summer, or early fall frosts is common to every part of the province.

(The greatest single problem of wheat production in Saskat--

⁶⁰See Preliminary Report on *Farms reporting Livestock by Kinds*, pp. 7, 10-11.

⁶¹See A. H. R. Buller, *Essays on Wheat* (New York, 1919), chaps. i-iv; and Morton and Martin, *History of Prairie Settlement and "Dominion Lands" Policy*, pp. 147-55.

chewan arises out of the variability of rainfall in the growing season. "Rainfall deficiency . . . divides the history of settlement into 'good' and 'bad' years.") It has been the chief conditioning factor of agricultural practice. In most years rainfall is deficient only in the sense that it is not adequate except for drought-resisting crops on land tilled by moisture conserving methods. It is approximately true to say that over nearly the whole of the West the agricultural economy is focussed on the conservation of moisture."⁵² (Not only is the actual rainfall inadequate over wide areas but the rapid rate of evaporation, caused by the hot, dry winds of summer, brings still further depletion of moisture reserves.) On the heavy drought-resistant soils especially, the introduction of dry-farming methods met the problem in its less acute form, but the final solution has yet to be found.

A period of drought unprecedented in the records of prairie settlement synchronized with a depression unprecedented in Canadian agriculture, and the province of Saskatchewan, in which the dried-out area chiefly lies, has had to bear an exceptionally heavy burden. For ten years the drought held almost unbroken over most of the best agricultural land in the province. The following extract gives a picture of conditions in 1934 in one section of the afflicted area:

We entered Saskatchewan at Antler . . . and from there to Stoughton, a distance of more than 50 miles, we passed through a landscape of almost incredible desolation. There had been a little rain this season, but the dry and thirsty soil, depleted of its reserve moisture by long continued drouth, had absorbed it without a trace remaining.

The land was as lifeless as ashes, and for miles there was scarcely a growing thing to be seen. Where a scanty herbage had struggled up through the dust, flights of grasshoppers had apparently completed the destruction and then despairing of further sustenance, had flown off to other fields.

⁵²Mackintosh, *Prairie Settlement: The Geographical Setting*, p. 14: "Variability of precipitation and the frequency of its deficiency increases as one moves from the sub-humid to the semi-arid belt. The district along the Alberta-Saskatchewan boundary which is characterized by a low percentage of land occupied, a low density of population, low crop yields, a high proportion of abandoned farms, and range densities of sheep and cattle is conditioned not only by a scanty rainfall but by a highly variable rainfall" (pp. 176-7). See also W. J. Waines, "Problems of the Drought Area in Western Canada" (*Essays in Political Economy in Honour of E. J. Urwick*, ed. H. A. Innis, Toronto, 1938, pp. 205-18), and *The Influence of Rainfall and Temperature on Wheat Yields in Saskatchewan* (Ottawa, 1937).

In many places the land lay untilled, and often where there were evidences of attempted cultivation, the fields were as black as when they had been turned over by the plough. Gaunt cattle and horses, with little save their skins to cover their bones, stalked about the denuded acres weakly seeking to crop the French weed, which with a malign persistence seemed to be maintaining some sickly growth. . . . The few people in evidence in the little towns appeared haggard and hopeless. For fully 50 miles of the region traversed by the highway which bears the ill-omened number of "13", there did not appear to be one single field that will produce a bushel of grain or a load of fodder. If there was anything of a more productive nature I failed to see it, and I was watching the landscape with care and attention. If the livestock of the district are to be saved they will either have to be moved away altogether or all the feed necessary to sustain them will have to be shipped in.

And as for the people themselves, God only knows what their extremity must be. Perhaps they have been unfortunate in their selection of a part of the country unsuitable for sustained cereal production, or they may be suffering from a combination of unfavourable conditions which comes only about once in a lifetime; but whatever the cause, the land upon which they have depended for sustenance has utterly failed them.⁵³

The area just described had not suffered as long or as acutely as some others.

In one day we zig-zagged across a little more than three municipalities in the western end of the Saskatchewan drouth area. . . . We had a look at some badly drifted land, piled with sand heaps, tunnelled with wind channels, or tufted with Russian thistle. . . . Six years of drouth have about brought that part of south-western Saskatchewan between Cadillac, Kincaid and Gravelbourg down to the lowest common denominator, which means that this section of the province may be designated as the "centre" of the so-called dried-out area. . . . One farmer south-west of Cadillac . . . gathered and threshed 400 bushels of wheat from 150 acres, his oats sown on 30 acres being a complete failure, making it necessary to buy oats for both seed and feed—if he can buy them. . . . This man is one of the best farmers in the municipality, according to the secretary. He came in and settled there with the majority of others in 1911. . . . Contrast this rather competent farmer with those who were not nearly so well fitted to combat six years of drouth. They were forced into taking relief assistance inside of two years. Their stock and equipment has deteriorated in accordance with their condition until neither have been capable of handling even reduced acreage sufficiently well to warrant returns comparable to the expenditure of effort and expense with the result that their crops are a complete failure.⁵⁴

⁵³"Milestones and Memories" by "The Stroller" (*Regina Leader-Post*, July 12, 1934).

⁵⁴D. B. MacRae and R. M. Scott, *In the South Country: A Reprint of a Series of Articles which appeared in the Winnipeg Free Press, Regina Leader-Post and Saskatoon Star-Phoenix in September, 1934, as the Result of a Tour of the Drouth-Stricken Districts of Saskatchewan and Manitoba* (Saskatoon, 1934), p. 13.

(It is generally conceded that, for the most part, there is nothing wrong with the soil; the choicest prairie wheatlands have been afflicted.)

Of thirty townships the information received indicated that only two appear to have been knocked out by soil-drifting. . . . The people living here. . . (say the land is still all right. (They still believe a come-back can be made if it will rain.) And the crop they think ought to be grown is a wheat crop. They say this is wheat country. It will grow wheat better than anything else—if it will only rain. They claim the average production of wheat up to 1929 indicates that the country was all right for the first 25 years of settlement. And six and seven and eight elevators at the towns stand as square and rugged testimony that it was not unusual for a good shipping point to send out a million bushels of wheat in one year.⁶⁶

The effects of prolonged and widespread drought on income and standards of living, the difficulties and magnitude of relief, the economic and social problems of rehabilitation will be discussed in subsequent chapters.

(To add to the devastation of drought came the grasshoppers.) The history of this plague extends back over a hundred years to the beginnings of settlement in the Red River Valley in Manitoba. Dry weather gives the grasshopper the most favourable conditions for breeding while reduced plant growth makes his depredations more apparent. The rapid development of the recent grasshopper plague is shown in table XIX which also gives the damage to Saskatchewan crops in recent years by the other important insect pests of the region, namely the sawfly, the cutworm, and the wireworm.⁶⁶ Grasshopper damage to wheat increased from 2.8 per cent in 1932 to 18.2 in 1933, but in the important south-central crop division, damage to wheat crops was estimated at 40 per cent and to other cereal crops as high as 80 per cent; in the north-east and north-west it was negligible.⁶⁷ In 1938 another severe infestation together with flights of grasshoppers from across the

⁶⁶*Ibid.*

⁶⁶See N. J. Atkinson, "The Increase of Native Insects to Economic Importance in the Prairie Provinces" (*Scientific Agriculture*, vol. XII, Dec., 1931, pp. 200-3); and *Guide to Saskatchewan Agriculture*, pp. 42-9.

⁶⁷"In considering the high percentage of crop damage by grasshoppers, as estimated for crop Districts 1, 2, 3, 4, 6 and 7, it is essential to keep in mind that drought and soil drifting were dominant factors in reducing crop yields and it is extremely difficult to differentiate accurately between the loss caused by insects and that occasioned by drought" (*Report of the Secretary of Statistics, 1934, Department of Agriculture, Saskatchewan*, p. 89).

international border resulted in heavy damage to both wheat and oats over extensive areas in the south-eastern, south-central, and central crop districts. A winning battle is being fought against the grasshoppers. Areas of infestation are not uniform from year to year but can be predicted with reasonable accuracy by entomologists. It has been estimated that the well-organized fall-tillage programme and grasshopper poisoning campaign of

TABLE XIX

PERCENTAGE REDUCTION OF GRAIN YIELDS FROM MAJOR INSECT PESTS IN SASKATCHEWAN, 1927-37*

Year	Grasshopper	Sawfly†	Wireworm	Cutworm
1927.....	...	2.9	1.9	0.3
1928.....	...	2.4	1.6	0.2
1929.....	...	4.2	1.8	0.7
1930.....	...	3.8	1.8	3.8
1931.....	1.2	4.3	2.6	3.8
1932.....	2.8	3.2	2.5	5.4
1933.....	18.1†	3.7	2.1	1.8
1934.....	7.8†	1.6	2.0	1.1
1935.....	4.0†	3.3	3.5	2.0
1936.....	2.1†	3.4	3.0	1.1
1937.....	6.5†	‡	‡	‡

*Information supplied by the Dominion Entomological Laboratory, Saskatoon.

†Wheat damage only. Estimated grasshopper damage to coarse grains was: 1933, 24.9 per cent; 1934, 4.9 per cent; 1935, 5.1 per cent; 1936, 2.8 per cent; 1937, 6.5 per cent. All 1937 figures subject to revision.

‡Calculation of damage rendered impossible by widespread failure of all cereal crops.

1933-4, when infestation covered two-thirds of the province and was greater than ever experienced before, saved at least 10 million bushels of wheat in 1934. This campaign was organized jointly by the provincial government and interested rural municipalities, the former financing the purchase of bait materials, such as bran, sawdust, and sodium arsenite, at a total cost of \$464,000, while the municipalities maintained the mixing and distributing stations.⁵⁸ The infested area was divided into twenty-four districts with a representative from either the Dominion Entomological Laboratory, Saskatoon, or the Saskatchewan Field Crops Branch,

⁵⁸Information by correspondence from Mr. R. W. Neely, Secretary of Statistics, Department of Agriculture, Regina, Aug., 1935.

Regina, as supervisors. Meetings of farmers were held and local committees appointed to see that the proper control procedure was put into effect.

Damage from other insect pests also tends to be most severe in the prairie wheat belt, although considerable loss is caused by cutworm in the north-west. All insect damage can be reduced by careful cultivation practices.

(The control of insect pests is closely related to the control of weeds⁵⁹ but a marked increase in nearly all weeds has resulted from the lack of feed and farm power which has prevented timely and thorough control work in many districts during recent years.) The most pernicious weeds are perennial sow thistle, couch grass, and Canada thistle, though common weeds, such as wild oats, Russian thistle, tumbling and yellow mustard, French weed, and lamb's quarter, probably cause much greater annual loss. The more recently developed districts are, as yet, relatively free from weeds but in the older districts of the prairies and the rich agricultural country of the Carrot River Valley weeds constitute an increasing problem.

(Wheat-stem rust is by far the most destructive plant disease with which the western farmer must contend and is most prevalent in the provinces of Saskatchewan and Manitoba.) It is caused by a fungous parasite which is blown northward from the wheat areas of the United States. Damp, warm weather in the early part of the summer is particularly favourable to the germination of these spores and the degree to which the Western Canadian crop is affected naturally depends to a great extent upon the direction of the winds in the earlier part of the growing season.

The loss to western farmers from wheat-stem rust over the last twenty years has averaged at least \$25,000,000 annually, the bulk of which has occurred in Saskatchewan. In years of serious infestation, as in 1916, 1925, and 1927, injury to the wheat crop has risen to more than \$100,000,000.⁶⁰ In 1935 weather conditions were such as to cause another severe outbreak in the best crop area

⁵⁹See *Guide to Saskatchewan Agriculture*, pp. 34-42. "Weeds in general have about the same water requirement as crop plants, and . . . loss in yield of grain competing with weeds not infrequently runs higher than 50 per cent" (p. 35).

⁶⁰See D. L. Bailey, *Stem Rust in Western Canada* (Studies in Cereal Diseases, IV, Ottawa, Department of Agriculture, 1928); and F. J. Greaney, "Cereal Rust Losses in Western Canada" (*Scientific Agriculture*, vol. XVI, July, 1936, pp. 608-13).

of Saskatchewan, and although the financial loss was not as heavy because of the lower price, the crop damage was comparable with the worst years previously experienced.⁶¹ In 1938 rust damage again extended over a large part of the province although the seeding of new rust-resistant wheats in the highly susceptible areas of the south-east held losses to below the 1935 level.

Early seeding and the use of early maturing varieties so that grain may ripen before it becomes seriously infected have tended to reduce losses and there is assurance that prevention of the heavy losses from this source is definitely in sight. Several high quality rust-resistant wheats, of which the most important are Thatcher, Apex, and Renown, have been developed⁶² and in 1939 sufficient seed will be available to replace several million more acres of the present rust-susceptible strains by the rust-resistant wheats.

Of other plant diseases it has been estimated that root-rot has been responsible for crop losses in excess of ten million bushels of wheat annually in Saskatchewan for a number of years. Root-rot diseases are more commonly found in the park belt. The "smut" diseases which have caused considerable loss to wheat growers in the United States have never been serious in Western Canada because farmers have always treated seed wheat and other cereals chemically for "bunt" and because most of the varieties seeded are fairly resistant to loose smut.

(The terror of hail has always been with the Saskatchewan farmer though losses from this quarter, over a period of years, have been much greater in some districts than others.) The danger from hail tends to be greater in good crop years and the farmer who has seen a promising crop completely wiped out in ten minutes is not likely to forget the spectacle. Hail, nevertheless, is the one major risk against which insurance is possible, premium rates being based on the loss history of a given district.

The Saskatchewan Municipal Hail Insurance Association represents an attempt by prairie wheat growers to provide a system of

⁶¹F. J. Greaney estimates the 1935 damage at 56,571,000 bushels of wheat in Saskatchewan and 30,674,000 in Manitoba valued at a total of \$55,415,000. For the eleven years, 1925-35 he thinks "a conservative estimate of the average annual loss caused by all cereal rusts in the three prairie provinces of Canada is \$40,000,000" (p. 613).

⁶²See J. B. Harrington *et al.*, *Description of Grain Varieties and Recommendation as to Where They Should be Grown in Saskatchewan* (Saskatoon, 1938), pp. 1-6.

co-operative or mutual insurance against this hazard. After an experimental period of several years the present organization, consisting of a body composed of one member from each rural municipality joining the Association and a managing Board of Directors elected from this body, took shape in 1917.⁶³ Any rural municipality might associate itself with the organization by majority vote of the ratepayers following which all agricultural land within the municipality, with the exception of crown and pasture land, became liable to a flat rate of 4 cents an acre with an additional levy per acre of cropland determined annually by the directors of the Association on the basis of the hail loss record of each municipality over a period of years. However, provision was made whereby any farmer in a municipality belonging to the Association might contract out of the scheme before May 1 in any year, thus releasing his land from all hail taxes. Insured farmers might cancel insurance on crop acreages destroyed by agencies other than hail up to July 31 and pay a reduced assessment. The maximum insurance payable in the event of 100 per cent loss of insured crop was fixed at \$5 per acre.

The usefulness of the Association to wheat farmers has been demonstrated by its steady growth. By 1930 the organization included most of the municipalities in the wheat belt and was carrying an annual insurance risk of 40 million dollars covering 8 million acres of grain, which was almost equal to the total value of policies written by the fifty-four commercial companies in the field.⁶⁴ Losses paid, though subject to great variation from year to year, were averaging upwards of \$1,500,000 annually and a claims reserve fund in excess of \$2,500,000 had been built up.

Since 1930 municipal hail insurance has been the only hail protection that the majority of farmers could afford and con-

⁶³In 1900 the government of the North West Territories made provision for farmers' mutual hail insurance organizations but substituted a government scheme the following year. In 1912 a system of municipal hail insurance was provided for by statute (2 Geo. V, c. 25) setting up a Hail Insurance Commission to manage the scheme. After heavy losses in 1916 the Municipal Hail Insurance Association replaced the Commission in 1917 (8 Geo. V, c. 15) and a further Act in 1919 (9 Geo. V, c. 41) introduced the adjustable "crop-rate" assessment feature which placed the system on a sound financial basis.

⁶⁴See *Directors' and Auditor's Reports of the Saskatchewan Municipal Hail Insurance Association for the year ending January 31, 1931* (Regina, 1931), p. 3. Hail tax levies make up from 6 to 12 per cent of the annual tax levies for all rural municipalities, depending on hail damage.

sequently the relative economic significance of the Association has been greatly increased. In the five years 1931-5 inclusive, the Association paid out in cash indemnities nearly four times the amount paid out by all the commercial companies.⁶⁵ Certain readjustments have been made to meet special circumstances arising out of drought and depression. After experience with cancellations covering two million acres destroyed by drought in 1931, cancellation privileges were widened in 1932, and in 1933 the Association secured amendments to the Municipal Hail Act permitting reduction of the maximum indemnity payable to \$4 per acre and reducing the flat rate tax to 3 cents an acre.⁶⁶ Following payment of loss claims amounting to more than \$1,000,000 in 1934, and although the book reserves of the Association had risen to \$3,750,000, the directors felt it necessary to review the real financial position of the Association: "Having sold over \$1,600,000.00 of securities during the last five years, the invested reserve has been very seriously depleted, until at the end of January, 1935, the only 'quick' assets remaining are \$293,000.00 in Provincial bonds and \$79,690.00 in City bonds, the sale of which might raise \$360,000.00, or a lesser amount if the securities are pledged against a loan. There is in addition over \$400,000.00 of Rural securities, but as so many of these are badly in default, no market value can be quoted nor could any appreciable amount be raised on them by way of a loan."⁶⁷ The balance of the Association's assets were made up of hail tax arrears which had increased from \$177,000 at the beginning of 1930 to \$2,929,691 at the beginning of 1935. Recognizing that with a continuation of even normal losses and no improvement in tax collections, "it is possible that the Association may have assets amounting to three or four times the value of the claims and still be unable to pay the claims in full with cash. . . it was thought advisable to have Section 43 of The Municipal Hail Insurance Act amended to make it perfectly clear that the Association could make a 'pro rata' distribution—not of revenue or assets, but of cash—and still at

⁶⁵See *Directors' and Auditor's Reports for the Year ending January 31, 1936*, p. 4. The losses paid over the five years were \$4,128,200 and \$1,047,896 respectively. The number of municipalities belonging to the Association also increased from 151 in 1930 to 159 in 1935.

⁶⁶*Statutes of Saskatchewan*, 22 Geo. V, c. 32, and 23 Geo. V, c. 31. In 1934 the flat rate was reduced to 2 cents an acre (24 Geo. V, c. 23).

⁶⁷*Directors' and Auditor's Reports for the Year ending January 31, 1935*, pp. 3-4.

the same time carry on the business in succeeding years".⁶⁸ Nevertheless in 1935, 1936, and 1937 the Association succeeded in paying claims amounting to \$1,444,130 in full, although "quick" assets showed further reductions and tax arrears increased to \$3,817,488.⁶⁹ Finally, in 1938 with losses of \$971,000, after disposal of all further "quick" assets and after refusal of the banks to lend on the security of remaining assets, the Association was forced to make a distribution of 75 per cent on claims and to announce that "the balance of payment will depend entirely on future collections".⁷⁰

Drought and grasshoppers, frost and hail, rust and noxious weeds make a grim and formidable array against the grain grower. Few communities have escaped the ravages of one or more of these foes, though a reasonable degree of prosperity had been attained by the average established farmer on the better soil types of Saskatchewan by 1929. Even in 1937 communities might be found which, according to local report, had never had a crop failure; the crops in such districts have varied with weather conditions, but there has always been a harvest. Such fortunate communities are rare. To the greater part of the wheat economy the last ten years would have been extremely difficult and trying years even with normal prices. The complete collapse of wheat and other agricultural prices produced a desperate situation.

⁶⁸*Ibid.*, p. 4. See also *Statutes of Saskatchewan*, 25 Geo. V, c. 32.

⁶⁹*Directors' and Auditor's Reports, 1936* (season of 1935), p. 10; *1937* (season of 1936), p. 11; *1938* (season of 1937), pp. 4-10. The Directors estimated that the Association would be required to cancel arrears of taxes of approximately \$2,100,000 in the drought area under the provincial government's debt adjustment programme (p. 11).

⁷⁰See report in *Saskatoon Star-Phoenix*, Nov. 15, 1938. Payment of all 1938 claims in full was announced just as this book went to press.

CHAPTER V

INCOME AND EXPENDITURE

No other governmental unit in the world attempting to maintain a modern civilization and standard of living is so completely dependent on the production and marketing of one commodity—a commodity which under even normal conditions is subject to wide variations in production and price.—THE BANK OF CANADA

1. GROSS FARM INCOME

(The income¹ of the province of Saskatchewan as a whole depends fundamentally on the volume, price, and, to a less degree, the grade of its export staple, wheat, and is extremely variable.) The variability in the gross income of the Saskatchewan farmer, described by Dr. Mackintosh for the period 1900-32,² has become even more pronounced in the period 1930-8.

With very limited regional exceptions, the last nine years have been extremely difficult and discouraging to Saskatchewan agriculture. From 1924 to 1928, the annual value of the provincial wheat crop was 240 million dollars, but from 1929 to 1936, inclusive, yields have averaged only 60 per cent of the preceding five-year period, and farm prices of wheat about 56 per cent. The disaster of the 1937 crop year is the worst of the series. Declines in revenues from wheat have brought prolonged hardships. Since 1930, the average values of the wheat crop have been about one-quarter of those from 1924 to 1928, with that of 1937 being only about one-eighth of this amount. The absence of receipts from other sources, the loss of feed crops, and the partial or complete failures of pastures and grazing areas accentuated the difficulties connected with livestock enterprises. With revenues from most farm enterprises continuing severely restricted, the problem of financing Saskatchewan agriculture increases in difficulty, as do those relating to rural, urban, and provincial governments.³

The strains which result when income variability is associated with heavy overhead costs have become more pronounced as the variation has become more violent.⁴

¹See G. E. Britnell, J. J. Deutsch, D. C. MacGregor, and J. B. Rutherford, *National Income: A Study prepared for the Royal Commission on Dominion-Provincial Relations* (Ottawa, 1938).

²W. A. Mackintosh *et al.*, *Economic Problems of the Prairie Provinces* (Toronto, 1935), pp. 26-8.

³William Allen and E. C. Hope, *The Farm Outlook for Saskatchewan, 1938* (Saskatoon, 1938), p. 2. See also *ibid.*, 1939 (Saskatoon, 1939), pp. 1-2.

⁴See particularly *A Submission by the Government of Saskatchewan to the Royal Commission on Dominion-Provincial Relations* (Canada, 1937) (Regina,

The decline in agricultural income is shown in table xx which gives the estimated value of all products actually sold off the farms of Saskatchewan for each of the nineteen years from 1920 to 1938. (Values for other than cereal crops are incomplete prior to 1920.) This table gives a more exact representation of *cash* incomes than the usual estimates of the gross value of agricultural production which make no deductions for produce retained on the farm, seed, feed, etc., including, for instance, both the livestock and the feed consumed by the livestock. (On the other hand, it must be remembered that a large part of the livestock, dairy, poultry, and garden products are consumed by the farm family, thus forming a part of the farmer's *real* income, and to that extent rendering him independent of cash income.) In Saskatchewan, however, the farmer is, and must be, primarily and preponderantly dependent on cash income.) This cash income declined from nearly 334 million dollars in 1925 to 66 million dollars in 1931 and has shown little improvement since that time. If the eighteen years 1920-37 are divided into two equal periods, 243 million dollars is seen to be the average annual return for the first nine years, and less than 93 millions for the second nine years.⁵ Thus the average annual cash income of

1937), *passim*; Mackintosh et al., *Economic Problems of the Prairie Provinces*; H. A. Innis and A. F. W. Plumptre (eds.), *The Canadian Economy and its Problems* (Toronto, 1934); H. A. Innis, *Problems of Staple Production in Canada* (Toronto, 1933), and "Notes on Problems of Adjustment in Canada" (*Journal of Political Economy*, vol. XLIII, Dec., 1935, pp. 800-7); R. McQueen, "Economic Aspects of Federalism: A Prairie View" (*Canadian Journal of Economics and Political Science*, vol. I, Aug., 1935, pp. 352-67); G. E. Britnell, "Saskatchewan, 1930-35" (*ibid.*, vol. II, May, 1936, pp. 143-66); "Alberta, Economic and Political: The Elliott-Walker Report; A Review" (*ibid.*, vol. II, Nov., 1936, pp. 524-32); W. J. Waines, "Federal Public Finance: Canada" (*ibid.*, vol. III, May, 1937, pp. 181-96), and "Problems of Public Finance in the Prairie Provinces" (*ibid.*, Aug., 1937, pp. 355-69); J. B. Rutherford, "Agricultural Income" (*ibid.*, vol. IV, Aug., 1938, pp. 420-31). See also *Reports on the Financial Position of the Provinces of Manitoba, Saskatchewan and Alberta, 1937* (Ottawa, Bank of Canada, 1937); *Report of the Commission of Inquiry into Provincial and Municipal Taxation to the Government of the Province of Saskatchewan, 1936* (Regina, 1936); *Manitoba's Case: A Submission Presented to the Royal Commission on Dominion-Provincial Relations by the Government of the Province of Manitoba* (Winnipeg, 1937); *The Case for Alberta: Part I: Alberta's Problems and Dominion-Provincial Relations addressed to the Sovereign People of Canada and their Governments* (Edmonton, 1938).

⁵No allowance has been made in the 1936 and 1937 values of livestock sales for forced liquidation of herds due to shortages of feed and fodder. Sales of this nature really represent capital disinvestment and should not be treated as

the second nine-year period was less than 40 per cent of that of the first. The provisional estimate of cash income for 1938, if added, would still further reduce the annual average of the last decade.

TABLE XX

ESTIMATED VALUE OF AGRICULTURAL PRODUCTS ACTUALLY SOLD OFF FARMS IN
SASKATCHEWAN, 1920-38*
(in thousands of dollars)

Year	Coarse grains and		Livestock	Dairy	Poultry	Wool	Total
	Wheat	flax seed					
1920....	\$170,128	\$24,157	\$10,963	\$7,200	\$2,900	\$400	\$215,748
1921....	121,013	15,400	4,404	5,100	3,500	140	149,557
1922....	172,718	19,829	7,427	5,400	3,200	231	208,805
1923....	156,966	20,817	7,570	5,800	3,200	158	194,511
1924....	149,376	24,134	10,972	7,407	3,147	154	195,190
1925....	285,271	22,723	13,832	8,377	3,543	148	333,894
1926....	220,781	19,046	13,349	8,146	3,527	147	264,996
1927....	221,537	25,679	14,493	7,257	3,282	157	272,405
1928....	217,927	28,035	15,947	7,826	3,593	238	273,566
1929....	134,932	15,124	16,978	8,846	3,654	141	179,675
1930....	72,293	7,411	11,407	7,212	3,400	80	101,803
1931....	44,407	5,219	7,245	6,374	2,900	61	66,206
1932....	56,889	3,625	4,641	4,972	2,000	52	72,179
1933....	52,301	4,950	5,789	5,518	2,100	171	70,829
1934....	57,950	6,384	8,586	5,980	2,400	106	81,406
1935....	68,400	4,561	11,813	6,350	3,000	134	94,258
1936....	78,200	12,800	14,519	6,886	3,600	167	116,172
1937....	17,850	1,865	20,955	7,350	3,200	175	51,395
1938†...	63,800	3,610	8,283	7,000	2,800	130	85,623

*Supplied by the Secretary of Statistics, Department of Agriculture, Regina.

†Provisional; subject to revision.

(The analysis of agricultural revenue in table xx makes it clear that proceeds from the sale of wheat form the backbone of farm income.) Ordinarily fully 80 per cent of the cash receipts come from wheat, rather less than 10 per cent from other field crops (oats, barley, rye, and flax seed), and approximately 10 per cent from the sale of livestock, dairy, and poultry products.⁶ (During

"income". A conservative estimate of such sales in 1936 would be \$3,000,000 and in 1937, \$9,000,000.

⁶For a table showing proportional distribution of revenues derived from wheat and other farm products by years since 1920, see *A Submission by the Government of Saskatchewan*, p. 173. On the prairie plains wheat commonly accounts for 90 per cent of all cash receipts.

the depression agriculture has continued to remain dependent on wheat for the bulk of its revenues, but the relative importance of animal products has more than doubled, despite the disappointing prices which have prevailed.) This increased relative importance can be explained chiefly as the result of the abnormally small wheat crops, but also of the stimulus that low prices of oats and barley have given to the use of these grains in the feeding of livestock on the more diversified farms of the park belt, thus bringing about a considerable increase in the physical volume of livestock, dairy, and poultry products available for sale.⁷ Such changes are evidence of the attempt to meet the decline in wheat prices by reorganization; but the technical conditions of western agriculture, and the decline in the prices of such alternative products as are technically practicable, make possible only slight mitigation.

TABLE XXI

ESTIMATED AVERAGE FARM PRICES IN SASKATCHEWAN, 1920-38*

Year	Wheat	Oats	Barley	Rye	Flax	Cattle per head
1920.....	\$1.55	\$0.41	\$0.66	\$1.26	\$1.82	\$59.00
1921.....	.76	.24	.36	.67	1.38	33.00
1922.....	.85	.29	.38	.53	1.71	28.00
1923.....	.65	.25	.35	.45	1.75	26.00
1924.....	1.21	.43	.63	.95	1.95	28.00
1925.....	1.25	.35	.47	.72	1.84	31.00
1926.....	1.08	.42	.45	.74	1.60	32.00
1927.....	.97	.44	.61	.79	1.52	42.00
1928.....	.77	.38	.48	.74	1.56	53.00
1929.....	1.03	.50	.51	.82	2.37	52.00
1930.....	.47	.15	.12	.17	.89	41.00
1931.....	.38	.18	.21	.23	.77	29.00
1932.....	.35	.13	.19	.24	.60	20.00
1933.....	.47	.19	.24	.33	1.19	19.00
1934.....	.61	.27	.47	.46	1.13	18.00
1935.....	.60	.17	.24	.25	1.18	22.00
1936.....	.92	.35	.67	.63	1.44	21.00
1937.....	1.05	.38	.46	.67	1.42	23.00
1938†.....	.58§	.16	.22	.25	1.11	25.00

*Two other items which are supplying increasing, although as yet relatively very small, proportions of the farm income are the wool-clip—which has shown a marked increase in volume as certain sections, particularly the south-west, have expanded their sheep production—and honey, the production of which also increased substantially between 1928 and 1938.

TABLE XXI—*Cont.*

Year	Sheep per head	Swine per head	Cream† per lb. butterfat c.	Dairy butter per lb. c.	Eggs per doz. c.	Wool unwashed per lb. c.
1920.....	\$8.00	\$20.00		25		19
1921.....	6.00	14.00		25.4		12
1922.....	7.00	13.00		25		16
1923.....	6.00	10.00		25		18
1924.....	9.00	11.00		25		23
1925.....	9.00	16.00	33	26		21
1926.....	9.00	17.00	32.8	25		19
1927.....	9.00	13.00	34	26	30	19
1928.....	10.00	14.00	35.7	26	29	22
1929.....	9.00	16.00	35.4	26	28	19
1930.....	6.00	16.00	26	20	19	9
1931.....	4.00	5.00	20.1	15	10	5
1932.....	3.00	3.50	14.1	12	8.5	4
1933.....	3.46	5.00	15.6	12.5	7	10
1934.....	3.30	8.00	17.1	13.5	10.5	7
1935.....	4.14	8.50	16.8	14	12.5	9
1936.....	4.38	8.45	18.6	15.5	13.5	11
1937.....	4.72	8.50	21.7	17	14.5	12
1938†.....	4.75	10.00	20.3	16	14.5	9

*Supplied by the Secretary of Statistics, Department of Agriculture, Regina.

†The prices for 1935 and subsequent years are net to producers. In former years the majority of creameries purchased cream on a "delivered at factory" basis.

‡Provisional; subject to revision.

§On basis of government guaranteed price of 80 cents a bushel for no. 1 Northern at Fort William and Port Arthur.

(The decline in the returns from wheat is a joint product of reduced volume and lower prices.) The average yearly production of wheat from 1920 to 1928 was 220.5 million bushels, that for 1929-38 was 138 million bushels—a reduction of more than one-third. At the same time, it should be noted that the superior quality of the 1929-38 wheat crops as compared with the 1920-8 crops would normally have brought premiums which would have partially offset the reduced yields, however unequally this compensation might have been distributed over the province. (Hence the collapse of prices which came in 1930 has been the most important factor in reducing the revenue of the province.) The unequal incidence of failure has made for great inequality within

the province, with complete destitution in the drought areas. Table XXI, showing the estimated average farm prices of wheat⁸ and other farm products, indicates the drastic nature of this price movement. (The wheat crop of 1932 was the largest since 1928 and graded higher than any crop in the last twenty years but it was sold for an average price of 35 cents a bushel, whereas the extremely low-grade crop of 1928 brought 77 cents a bushel.) Prices of all coarse grains and flax seed fell even faster and further, proportionately, than wheat. Prices of livestock, dairy, and other animal products while not, on the whole, showing the same precipitate decline as cereals, reached similar low levels by 1932, and the measure of recovery shown by agricultural prices in general up to 1937 was rather less evident in their case. (In the summer of 1938 the prices of wheat and coarse grains collapsed again and only purchase of the 1938 wheat crop by the federal government through the Canadian Wheat Board at a guaranteed price of 80 cents a bushel on the basis of no. 1 Northern at the head of the lakes or Vancouver prevented the farm price of wheat from falling along with coarse grains (for which the government assumed no market liability) to the ruinous levels of 1932.)

While revenues from the sale of farm products do not constitute the entire farm income, receipts from other sources frequently represent merely cross payments within the agricultural community. Thus individual farmers who own power equipment may do contract work for their neighbours in the form of field work, threshing and "combining" cereal crops, and trucking grain or livestock. Breeding and pasture fees are in the same class. Road work is a small item except in relief areas, but if paid out of taxes raised in the province is another "transfer" of income. Few Saskatchewan farmers have incomes from investments, or from outside sources. Any surplus which may accrue during good years is likely to be absorbed in improvements to buildings, equipment, and stock, in increasing the size of the farm unit, or in raising the standard of living.⁹ Life

⁸The farm price of wheat excludes certain fixed charges of about 20 cents a bushel for freight, elevator handling charges, inspection and grading fees, commissions, etc.

⁹Farmers in well-established districts on the better soil types of the province sometimes have outside resources. In 1933 in the Balcarres-Indian Head district it was found that "many farmers had moderate resources not associated with their farms. These reserves included such items as life insurance; farm property, other than that operated; city real estate; and stocks, bonds and shares

insurance policies probably constitute the most important outside resource, yet in surveys made between 1930 and 1934 in representative districts of the province, and covering some 2,000 farms, only 46.5 per cent of the farm operators reported policies,¹⁰ while in an economic survey embracing 839 farms in seven rural municipalities of south-western Saskatchewan in 1935 only 21.6 per cent of the operators had policies and 68.8 per cent of all policies contracted had been discontinued, generally because of inability to meet premiums.¹¹ No definite figures are available for the entire province, but it seems likely that considerably less than half the farm operators carry any life insurance; policies tend to be relatively small and the investment or estate features are less significant than for many other groups in the community. (Thus there has been little in the way of alternative production, cash reserves, outside investments, or independent income to cushion the shock to the wheat economy which came with drought and the catastrophic fall in the price of the export staple.)

2. NET FARM INCOME

(“A farmer is kept solvent not by his *gross* income but by his *net* income.”) Dr. Mackintosh was concerned to show what deductions from gross income should be made before determining the income available to pay interest charges and to provide a return to the farmer on his own capital investment. Estimates were therefore made of the amount and variability of “net cash income per acre of wheat” in each of the nine crop-reporting districts of Saskatche-

in various undertakings or organizations (private or co-operative)” (*Studies of Farm Indebtedness and Financial Progress of Saskatchewan Farmers. Report no. 3: Surveys made at Indian Head and Balcarres; Grenfell and Wolseley; and Neudorf and Lemberg*, in 1933, contributed by the Department of Farm Management, University of Saskatchewan, Saskatoon, College of Agriculture, Bulletin no. 68, 1935, p. 29).

¹⁰From materials of surveys made by the Department of Farm Management, University of Saskatchewan, at Kindersley; Turtleford; Davidson; Richmond, Golden Prairie, and Burstall; Maple Creek and Hatton; Rosemount and Reford; Scott, Wellington, and Brokenshell; Indian Head and Balcarres, Grenfell and Wolseley, Neudorf and Lemberg; and Humboldt.

¹¹See W. J. Hansen, “Some Facts concerning Life Insurance in South-western Saskatchewan” (*Economic Annalist*, vol. VI, Feb., 1936, pp. 6-10). See also W. J. Hansen and J. Proskie, “Life Insurance carried by Farmers in the Lomond and Vulcan Districts, Alberta” (*ibid.*, Oct., 1936, pp. 76-9).

wan for the period 1921-9.¹² Since 1929 a paraphrase might be adopted: "A farmer is kept off relief not by his gross income, but by his net income." (Over a large part of Saskatchewan drought has brought repeated crop failures so that gross incomes have been insufficient to meet cash operating expenses, even when the utmost ✓ economy has been exercised and when all postponable repairs and replacements have been ignored.) In these areas only the continuous provision of agricultural assistance (seed, feed, tractor fuel, repairs, binder-twine, etc.) and direct relief (food, clothing, fuel, etc.) ✓ by governments has prevented complete agricultural collapse and even widespread starvation. In some areas gross income has been sufficient to make relief unnecessary but the farmer has been forced to accept a standard of living far below that of 1928, taxes and debt charges have not been paid, and the farm investment has not been maintained. In a much smaller area, favoured by consistently good crops, taxes could be met, and in some cases even debt charges, but it must be emphasized that the decision whether to use income to maintain a decent standard of living and to make good depreciation or to pay taxes and debt has depended on the psychology of the farmers, the pressure exerted by creditors, and the political exigencies.

(Determination of the minimum expenses of growing wheat in Saskatchewan at any given time involves almost insuperable difficulties.) Dr. Mackintosh, basing his estimate on the bulletins of the Farm Management Department of the University of Saskatchewan, suggested "that for the period 1921-1930 the cash cost of wheat growing in Saskatchewan for average yield of 16.7 bushels ✓ was not far from \$9.81 per acre".¹³ The cost of living for the farm family is included in this estimate. In 1933 Dr. William Allen, after intensive surveys in many areas, estimated that \$6.80 per acre

¹²Mackintosh *et al.*, *Economic Problems of the Prairie Provinces*, pp. 28-32. "Net cash income" is defined for his purposes as follows: "By multiplying the average wheat yield per acre in each district by the average farm price received, the average gross income per acre of wheat may be obtained. By deducting from these calculated gross income figures the operating expense figure (adjusted for differences in yield) . . . average net income figures for each crop reporting district are obtained. This calculated net income includes the amount available for the payment of interest on indebtedness, interest on owned capital and profits for the farm enterprises. . . . It is the fund which must carry the fixed charges of both the individual enterprise and the agricultural community at large" (pp. 30-1).

¹³*Ibid.*, p. 30.

was necessary to clear minimum expenses without interest on debt.¹⁴ (The reduction in this figure is in part to be explained by a fall in the prices of some of the things farmers buy, but mainly by a drastic reduction in the already low standard of living of the farmer.) The application of these estimates to specific situations presents difficulties, some of which must be noted. Probably half the operating expenses (namely outlays for binder-twine and threshing) vary, though not directly, with the yield; but at the same time (operating expenses are perhaps the most rigid element in the structure since they must be met if production is to continue.) All capital expenditures may be overlooked for one year, perhaps even for two, but if a minimum provision is not made for them they will soon appear in the form of sharply increased operating expenses for repairs. (Living standards have shown much greater flexibility.)¹⁵

While fully recognizing the limitations of all such estimates of minimum operating expenses, there does seem to be some value in comparing the actual cash returns per acre with the best estimates of expense available. According to Dr. Allen's estimate, on the basis of 16.5 bushels of wheat per acre, the minimum necessary for a farmer in order to carry on without outside assistance would be about \$5.30 per acre of wheat, and to pay taxes about \$6.80 per acre. With a provincial average for the nine years 1930-8 of 9.4 bushels per acre,¹⁶ larger farms than the average for the Prairie Provinces, and ignoring all capital replacements for a year or two, a farmer might manage to live without outside assistance on average gross receipts of about \$4.50 per acre; to pay taxes, with \$5.50 per acre; and to meet debt interest, with \$7.00. These returns would not, of course, maintain farm equipment. Table XXII shows the gross average returns per acre of wheat for each of the nine crop-reporting districts, after 1.5 bushels per acre have been deducted from the gross yields for seed requirements. Wherever the gross income is so low that net income is probably a minus quantity, the figures have been italicized. No account was taken

¹⁴See G. E. Britnell, "Profit and Loss: The Depression in Rural Saskatchewan" (*The Canadian Economy and its Problems*, ed. Innis and Plumptre, p. 101).

¹⁵See below, chap. vii.

¹⁶The estimated average yield for 1938 is 9.6 bushels per acre, which at the farm price of 58 cents would give a gross return of \$4.70 per acre, when seed requirements had been deducted.

of sectional variations in grade except in 1935,¹⁷ but in view of the uniformly high quality of wheat over the remainder of the period the margin of error resulting from basing calculations on the average grade for the province cannot be large. Over the greater part of the province, as the italics indicate, some government assistance has been necessary to eke out gross incomes in every year since 1931.

TABLE XXII
CASH RETURNS PER ACRE OF WHEAT IN CROP-REPORTING DISTRICTS OF
SASKATCHEWAN, 1930-8*

Districts	1930	1931	1932	1933	1934	1935	1936	1937	1938
South-eastern.....	\$5.83	<i>\$1.29</i>	<i>\$3.63</i>	<i>\$3.29</i>	<i>\$2.01</i>	<i>\$1.40</i>	<i>\$3.06</i>	<i>\$2.73</i>	<i>\$3.65</i>
Regina-Weyburn.....	<i>4.56</i>	<i>.11</i>	<i>3.32</i>	<i>5.13</i>	<i>2.01</i>	<i>2.95</i>	<i>7.39</i>	<i>Nil</i>	<i>4.58</i>
South-central.....	<i>3.25</i>	<i>.61</i>	<i>2.37</i>	<i>1.18</i>	<i>1.28</i>	<i>5.98</i>	<i>2.82</i>	<i>Nil</i>	<i>3.13</i>
South-western.....	<i>5.74</i>	<i>1.60</i>	<i>4.06</i>	<i>1.32</i>	<i>1.60</i>	<i>4.20</i>	<i>Nil</i>	<i>Nil</i>	<i>4.35</i>
Central.....	<i>4.28</i>	<i>2.66</i>	<i>3.53</i>	<i>1.93</i>	<i>3.98</i>	<i>7.38</i>	<i>7.93</i>	<i>Nil</i>	<i>3.83</i>
West-central.....	<i>8.65</i>	<i>4.52</i>	<i>5.39</i>	<i>1.23</i>	<i>4.33</i>	<i>5.00</i>	<i>3.34</i>	<i>Nil</i>	<i>5.74</i>
East-central.....	<i>6.82</i>	<i>3.47</i>	<i>5.49</i>	<i>10.30</i>	<i>10.12</i>	<i>4.10</i>	<i>14.26</i>	<i>6.51</i>	<i>7.65</i>
North-eastern.....	<i>10.62</i>	<i>7.79</i>	<i>7.11</i>	<i>7.10</i>	<i>9.27</i>	<i>9.32</i>	<i>11.35</i>	<i>9.55</i>	<i>6.61</i>
North-western.....	<i>13.07</i>	<i>7.28</i>	<i>6.65</i>	<i>5.07</i>	<i>10.12</i>	<i>7.68</i>	<i>5.81</i>	<i>4.51</i>	<i>4.06</i>

*Based on crop yields and farm prices as supplied by the Secretary of Statistics, Department of Agriculture, Regina.

NOTE: Italics indicate districts in which government assistance was necessary.

(Decreased yields and depressed prices prevented farmers in each of the six crop districts of the prairie plains, which account for three-quarters of the wheat acreage of the province, from securing sufficient revenue to cover operating and living expenses and to pay taxes.) At the same time despite high average yields in east-central, north-eastern, and north-western crop districts making up the park belt area, the values of the wheat crops were sufficient to meet these charges plus interest over less than half the period.

Operating and living expenses are affected by the fall of commodity prices. (But the prices of commodities which the farmer must purchase declined much less rapidly than wheat prices and the incomes based on them.) [Fixed railway rates, high protective tariffs, and an economically vicious system of administered prices

¹⁷Sectional rust and frost damage seriously affecting grades made it necessary to calculate the 1935 returns per acre separately for each of the nine crop districts on the basis of grade and price variations.

effectively prevented relief in that direction.) (The price of wheat fell more than twice as far as the prices of the things he must buy.)

Any cash reserves possessed by the average farmer were exhausted long before he could make adjustments to 40-cent wheat.

Moreover, agricultural credit through the ordinary channels has been restricted since the beginning of the depression so that the differences between minimum expenses and market prices have been made up in many ways including: living out of capital (by allowing buildings, equipment, and supplies to run down); borrowings on life insurance policies; the accumulation of numerous small debts for goods and services in local centres; increased tax arrears; the abandonment of protection in the form of fire and hail insurance; and, finally, over wide areas, by government assistance on a large scale. }

3. FARM DEBT

{ The nature and the rapidity of agricultural development made Saskatchewan essentially a debtor community, but the depression increased sharply both the absolute and relative burden of farm debt.¹³ } (In the late twenties, particularly, with satisfactory yields }

(¹³"Without the availability of vast amounts of credit the rapid development of the prairies would have been impossible. From the earliest days of settlement the people have operated to a very considerable extent on funds made available from outside sources.") During the homesteading periods advances were made by lumber yards, implement companies, stores, and banks, and usually when the duties of homesteading had been completed, the different loans were consolidated in a real estate mortgage. As the districts developed, additional lands were acquired by the homesteaders, usually on the deferred terms of agreements of sale. The advances made for current operations by banks, and stores, and also by machinery companies and lumber yards, and later by oil companies for tractor fuel were usually paid shortly after the crop was harvested each year. The same practice was followed in connection with medical services and a variety of other things. (When a crop failed partially or completely it was usually possible for these debts to be carried along until the next harvest, which usually was bountiful enough to take care of the pressing demands made by the local businesses, thus these debts were seldom allowed to accumulate, and were generally regarded as temporary accommodations.) (During recent years Saskatchewan farmers have been unable to take care of their current obligations, because of the curtailment of revenues resulting from combinations of crop failures and low prices, thus debts of all classes have steadily increased, and have tended to assume a more permanent character") (William Allen, *Studies of Farm Indebtedness and Financial Progress of Saskatchewan Farmers. Report no. 1: Survey Made in the Rural Municipalities of Rosemount, no. 378, and Reford, no. 379, in 1932, Saskatoon, University of Saskatchewan, College of Agriculture, Bulletin no. 60, 1934, p. 45).*

{ and relatively high prices for wheat, credit was easy to secure and expansion was general, "consolidation almost being considered a sign of weakness".¹⁹ Farms were purchased, farm holdings were extended, power equipment of every sort bought, all on the assumption that returns would continue to permit contracts to be carried out. } Obligations which often proved difficult to support with good yields when wheat sold at \$1.25 per bushel quickly became impossible to meet in terms of 40-cent wheat and lower yields. } To have paid interest alone on the farm debt of the province would have taken nearly two-thirds of the wheat available for sale in every year since 1930 and taxes would have absorbed most of the remainder.²⁰

{ (Farm management surveys²¹ show a steep trend towards increasing indebtedness since 1930) (But whereas the increasing debt of the boom period was associated with an increase in earning assets, the increasing debt of the depression period is associated with deterioration of farm buildings and equipment,²² reduction of reserves of feed, seed, and supplies, and drastic shrinkage in capital expenditure on new equipment.) Debt increase has been the result of operating loss and accumulated interest on earlier debt. It was found in the course of these surveys that the average debt of farm operators at Rosemount and Reford in 1932 was 12.5 per cent higher than in

¹⁹Evidence of Dr. William Allen, *Proceedings of the Royal Commission on Banking and Currency*, 1933, vol. III, p. 1327 (mimeo.).

²⁰See Allen and Hope, *The Farm Outlook for Saskatchewan*, 1933, p. 3; 1934, p. 2; 1935, p. 2; 1936, p. 2; 1937, p. 2.

²¹See *Studies of Farm Indebtedness and Financial Progress of Saskatchewan Farmers*. Report no. 1, p. 25; Report no. 2: *Surveys made in the Rural Municipalities of Brokenshell*, no. 68; *Wellington*, no. 97; and *Scott*, no. 98, in 1932 (Saskatoon, University of Saskatchewan, College of Agriculture, Bulletin no. 65, 1935), pp. 30-1; Report no. 3, pp. 28-9; Report no. 4: *Survey made in the Humboldt District in 1934* (Bulletin no. 71, 1936), pp. 26-7.

²²See particularly the section on "Agricultural Depreciation and Disinvestment" in *A Submission by the Government of Saskatchewan*, pp. 196-202. "Since 1929, on the basis of studies made by the University of Saskatchewan, it is estimated that the farm equipment of this province has suffered a cumulative deterioration of at least 50%. Buildings, fences, and in many cases even the lands used for cultivation have also deteriorated heavily. Reserves of feeds and supplies have been exhausted, and much is needed to make up for the drains of the years of poor crops. In the farm homes household equipment, furnishings, and clothing, and even the people of the farm, bear pathetic testimony to the depleted revenues" (William Allen, "Recent Adjustments in the Organization of Canadian Agriculture", *Scientific Agriculture*, vol. XVII, April, 1937, p. 480).

1930,²³ while for the Scott, Wellington, and Brokenshell districts, where complete crop failures had been experienced in 1931, the average increase was 33.3 per cent for the two years.²⁴ The 1933 surveys at Balcarres-Indian Head, Grenfell-Wolseley, and Neudorf-Lemberg showed debt increases of approximately 27 per cent over 1931,²⁵ while at Humboldt in 1934 the two-year increase amounted to 15 per cent.²⁶ Assuming an 8 per cent rate of interest on previous indebtedness and no adjustments of interest or principal, it is clear that a large part of the increase in six of the eight districts was due to the necessity of borrowing to finance current operations.²⁷ (In 1935 a survey of seven representative municipalities in south-west central Saskatchewan, which had experienced the full force of the drought for an extended period, showed that about one-fifth of the total debt was for new credit in the form of relief advances and that "only eight out of 836 farmers had no relief indebtedness".²⁸) If comparable data for the nine-year period 1929-38 covering the drought area were available, undoubtedly a more disturbing situation would be revealed.

These surveys also make possible estimates of the average indebtedness of owner-operators in the various areas surveyed between 1930 and 1935.²⁹ Regional differences in farm indebtedness are partly due to differences in income-earning capacity and partly due to the increasing indebtedness as more years of depres-

²³*Studies of Farm Indebtedness, Report no. 1*, p. 48.

²⁴*Ibid.*, *Report no. 2*, p. 53.

²⁵*Ibid.*, *Report no. 3*, p. 50.

²⁶*Ibid.*, *Report no. 4*, p. 45.

²⁷Eighty-seven per cent of the operators at Balcarres-Indian Head, Grenfell-Wolseley, and Neudorf-Lemberg required new credit for the 1932-3 crop year. The average new credit per farm, excluding interest accrued on earlier indebtedness, for all farms in these districts was \$317, \$226, and \$152 respectively. In the previous year new credit of this kind at Scott had been \$1,293; at Wellington, \$822; and Brokenshell, \$571.

²⁸"Preliminary Report of Certain Physical and Economic Factors related to Land Use Classification in Southwest Central Saskatchewan, 1935" (Department of Farm Management, University of Saskatchewan, and Agricultural Economics Branch, Department of Agriculture, Ottawa, Nov., 1936, type-written), p. 82. See also G. C. Elliott, "Real Estate Indebtedness in Southwest Central Saskatchewan" (*Economic Annalist*, vol. VII, Feb., 1937, pp. 8-14).

²⁹For tables showing the average indebtedness per farm for 16 districts and the percentage classification of farm indebtedness for 10 districts, see *A Submission by the Government of Saskatchewan*, pp. 190-1.

sion passed. In the 1935 survey, only "two of the 836 farmers were without debt" and by 1934 Dr. Allen's investigations had led him to believe that probably not more than 5 per cent of Saskatchewan farmers were free from debt.³⁰ The low debt in the Maple Creek and Richmond areas and the differences in debt per acre of crop land as in the adjoining districts of Scott, Wellington, and Broken-shell may be explained in terms of differences in productivity and in land values which determined the amount of credit available in each case. On the basis of productivity, the poorer lands have generally been found to be the most deeply in debt. Given normal yields and prices, a similar principle appears to favour large farms with a high total debt as opposed to smaller units with lower indebtedness.³¹

(From the same material it has been possible to estimate the relative importance of the chief items making up farm debt.) Agreements of sale of land³² and mortgages bulk large in the total debt, and on the basis of these surveys it would appear likely that — (about two-thirds of the total farm debt of the province is in the form of long-term credits closely related to real estate.) Implement

³⁰William Allen, *Research in Farm Finance: A Preliminary Report of Field Studies conducted in the Summer of 1933 for the Saskatchewan Agricultural Research Foundation* (Saskatoon, University of Saskatchewan, College of Agriculture, 1934), p. 4.

³¹"With the increase in the size of the farms the total debt per farm increased, but the average debt per acre of cropland declined. Under normal yields and prices the greater debt of the larger farms can be taken care of more easily than the smaller debt on farms of lesser size, but when revenues decline below the operating costs of the efficient farmers, those having the larger farms are at a disadvantage, particularly if they have considerable debt" (*Studies of Farm Indebtedness, Report no. 1*, pp. 36-7).

³²Few land sales are for cash, a fact which has frequently made for inflated land values. In the majority of cases an initial payment of from 10 to 20 per cent is made and the agreement of sale stipulates that a one-half share of the proceeds of the crop grown on the purchased land each year be turned over to the vendor to be applied in payment of interest and reduction of outstanding principal. The last fifteen years have seen further adaptations of the system of land purchase to meet the problem of income variability in that some contracts have provided for the acceptance of a stated number of bushels of wheat, usually no. 2 Northern, instead of a stated number of dollars. At Kindersley in 1930 it was found that about one-fifth of the farm lands sold in the previous five years had been sold on this bushel basis. See R. W. Murchie *et al.*, *Agricultural Progress on the Prairie Frontier* (Toronto, 1936), p. 245.

debts were next in importance, followed by bank debts and taxes, though government assistance was a large item in some communities. }
 & (To protect the farmer against insistent creditors, debt postponement legislation was passed in 1931 and has been supplemented by amendments and further restrictive measures in each succeeding year.³³) Two of the most significant measures were the Debt Adjustment Act, 1933, which deprived the creditor of the use of the machinery of the courts for the collection of debts unless the creditor had first secured the permission of the provincial Debt Adjustment Board to bring the action,³⁴ and the Limitation of Civil Rights Act, 1933, which effected a revision of the terms of existing contracts such as mortgages and agreements of sale of land by restricting the creditor's rights to collection of the proceeds of one-third of the crop grown in any year less one year's taxes, regardless of the terms of the original contract.³⁵ An amendment to this Act in 1935 provided for the removal of the personal covenant in future mortgages and agreements of sale.³⁶ (However, it should perhaps be emphasized that all these measures had the effect of deferring collection of debts and were accompanied by a rapid

³³An Act to Facilitate the Adjustment of Agricultural Debts, *Statutes of Saskatchewan*, 21 Geo. V (1931), c. 59; 22 Geo. V (1932), c. 51; 23 Geo. V (1933), c. 82; 24 Geo. V (1934), c. 59; 25 Geo. V (1934-5), c. 88; An Act respecting the Postponement of Issue of Certificate of Title to Land Sold for Taxes, 21 Geo. V, c. 50; 22 Geo. V, c. 37, c. 38; 23 Geo. V, c. 34, c. 35; 24 Geo. V, c. 28, c. 29; 25 Geo. V, c. 39, c. 40; 1 Edw. VIII (1936), c. 52, c. 53; 1 Geo. VI (1937), c. 42; 2 Geo. VI (1938), c. 39; An Act Providing for Certain Temporary Changes in the Statute Law, 21 Geo. V, c. 51; 22 Geo. V, c. 36; 23 Geo. V, c. 33; An Act to Amend the Arrears of Taxes Act, 22 Geo. V, c. 33; 23 Geo. V, c. 32; 24 Geo. V, c. 24; 25 Geo. V, c. 35; 1 Edw. VIII, c. 46; 1 Geo. VI, c. 34; 2 Geo. VI, c. 30; An Act to Provide for the Consolidation of Certain Taxes, 23 Geo. V, c. 36; 24 Geo. V, c. 30; 25 Geo. V, c. 41; 1 Edw. VIII, c. 54, c. 55; 1 Geo. VI, c. 39, c. 40; 2 Geo. VI, c. 41, c. 42; An Act respecting the Limitation of Certain Civil Rights, 23 Geo. V, c. 83; 24 Geo. V, c. 60; 25 Geo. V, c. 89; 1 Edw. VIII, c. 119; 1 Geo. VI, c. 94.

³⁴23 Geo. V, c. 82, provided that in all future sales of farm machinery for more than \$100 (except binders), the vendor's right to recover unpaid purchase money should be restricted to his lien upon the article sold and his right of repossession and sale.

³⁵23 Geo. V, c. 83.

³⁶25 Geo. V, c. 89. "The vendor's or mortgagee's right to recover the unpaid balance due shall be restricted to the land sold or mortgaged and to cancellation of the agreement for sale or foreclosure of the mortgage or sale of the property, and no action shall lie on the covenant for payment contained in the agreement for sale or mortgage." Sec. 8 (1).

accumulation of arrears of interest rather than by any real scaling down of the burden.) Voluntary reductions in indebtedness effected under the Saskatchewan Provincial Debt Adjustment Board and incidental to its main purpose of administering legislation giving the farmer temporary "security of tenure" amounted to slightly more than \$1,000,000 at January 1, 1937.³⁷ (Privately arranged adjustments have doubtless been of greater importance but there is no way of estimating, even approximately, the amount of such reductions.)

The rapidly increasing burden of agricultural indebtedness and the natural reluctance of creditors to reduce their claims brought pressure for governmental intervention. To facilitate debt adjustment the Dominion government passed the Farmers' Creditors Arrangement Act, 1934,³⁸ under which official receivers were appointed and Boards of Review set up in each province with powers to enforce a settlement between debtors and creditors failing to come to an agreement. Rapid and effective action proved impossible since adjustments were made on an individual basis with consideration of each case on its merits and a majority of the cases were appealed from official receivers to the Board of Review. Reductions, while often important to individuals securing relief, have been insignificant when related to the total burden. At March 31, 1938, 4,659 Saskatchewan farmers had secured reductions amounting to \$14,533,478, through the agencies operating under the Act.³⁹

³⁷See *A Submission by the Government of Saskatchewan*, p. 192.

³⁸*Statutes of Canada*, 24-25 Geo. V, c. 53. See R. McQueen, "The Farmers' Creditors Arrangement Act, 1934" (*Canadian Journal of Economics and Political Science*, vol. I, Feb., 1935, pp. 104-8); and W. T. Easterbrook, "Agricultural Debt Adjustment" (*ibid.*, vol. II, Aug., 1936, pp. 390-401).

³⁹See *Annual Report: The Farmers' Creditors Arrangement Act, 1934. Fiscal Year, 1937-8* (Ottawa, 1938), pp. 12-14. Official Receivers in Saskatchewan settled 2,160 cases giving reductions amounting to \$5,889,737, and the Board of Review 2,499 cases with reductions of \$8,643,741. On operations under the Act to April 1, 1936, see discussion by G. E. Britnell (*Canadian Journal of Economics and Political Science*, vol. II, Aug., 1936, pp. 402-3). The first Saskatchewan Board of Review made 1,153 adjustments with an average reduction of \$3,018, or 27.8 per cent of the original debt involving an average annual reduction of \$171 in interest charges. The new Board of Review, which began to function August 17, 1936, had made, by December 31, 1938, 1,649 adjustments with an average reduction of \$4,875, or 45.6 per cent of the original debt, involving an average annual reduction of \$377 in interest charges. An

In September, 1936, the Saskatchewan government announced an agreement with the Dominion Mortgage and Investments Association under which a comprehensive scheme of agricultural debt adjustment on a voluntary basis would be established.⁴⁰ The new scheme involved partial abandonment of the principle of individual adjustment and aimed at the rapid scaling down of the debt burden by effecting what would be in essence a blanket reduction of relief, tax, and mortgage indebtedness. Farmers in approximately 174 rural municipalities and local improvement districts in the drought area were to receive the following concessions: (1) Cancellation by the provincial and federal governments of all indebtedness for direct relief (food, fuel, clothing, etc.) and agricultural aid (seed, feed, fodder, tractor fuel, implement repairs, etc.), "incurred prior to January 1, 1935, and advanced during the previous fifteen years". (2) Cancellation by the provincial government and the rural municipalities of all tax arrears and penalties with the exception of a sum equivalent to the latest two full years' levies unpaid as at July 1, 1936,—the 1936 levy to be considered due as at this date, although imposed later. (3) Cancellation by mortgagees and vendors of land under agreement of sale of all unpaid interest accumulated on farm mortgages and agreements of sale of land down to January 1, 1935, the outstanding principal of any such mortgage or agreement together with any unpaid interest for the years 1935 and 1936 to be consolidated in a standard renewal agreement (to be prepared by the government and the creditors) containing provision for repayment of the consolidated amount at 6 per cent interest over a period of ten years, and continuing restriction of the creditors' rights to collection of the proceeds of one-third of the crop during the years 1937, 1938, and 1939. The balance of the province was to receive no stipulated reduction of indebtedness but was to enjoy the reduction in interest rates and the ten-year extension of time for the payment of mort-

amendment to the Act, *Statutes of Canada*, 2 Geo. VI (1938), c. 47, s. 7 makes provision for the appointment of more than one board in any province.

⁴⁰For a fuller discussion of the programme, see G. E. Britnell, "The Saskatchewan Debt Adjustment Programme" (*Canadian Journal of Economics and Political Science*, vol. III, Aug., 1937, pp. 370-5). See also *Statutes of Saskatchewan*, 1937 and 1938, The Drought Area Debt Adjustment Act, 1937, 1 Geo. VI, c. 92 and 2 Geo. VI, c. 88; The Local Government Board (Temporary Special Powers) Act, 1937, 1 Geo. VI, c. 93 and 2 Geo. VI, c. 89; The Statute Law Amendments Act, 1937, 1 Geo. VI, c. 95 and 2 Geo. VI, c. 90.

gages and agreements of sale. The individual farmer was left free to choose whether he would accept the terms of the renewal agreements or press his claims for adjustment under the Farmers' Creditors Arrangement Act of the Dominion, though if he elected for the voluntary plan he could, in the future, still ask federal debt adjustment agencies to consider the burden of his remaining land, tax, and relief debt together with such indebtedness as was not covered by the voluntary scheme. Legislation was passed to facilitate operation of the tax cancellation programme; to provide for the adjustment of debentures, bank loans, and other debts of rural municipalities, rural and village school districts, rural telephone companies, and Union hospital boards, made necessary by the cancellation of taxes; and to give the government power to declare a moratorium against any one creditor or group of creditors, thus providing a means of bringing gentle pressure upon such mortgage companies as may have displayed reluctance to co-operate with the government.

Reductions effected on mortgages and agreements of sale to December 31, 1938, by which time adjustments under the Saskatchewan programme had been virtually completed, amounted to \$27,962,426; tax cancellations were \$23,167,351; and the relief write-off was \$32,000,000.⁴¹

The administrative work involved in effecting reduction of agricultural indebtedness and in the renewal of all farm mortgage contracts and agreements of sale under the programme, has made it possible to determine with a reasonable degree of accuracy, the total debt secured on farm lands in the province (table XXIII). The estimated amount of this debt including first and subsequent mortgages, agreements of sale, advances for direct relief and agricultural aid, arrears of taxes in rural municipalities and local improvement districts, executions, mechanics' liens (covering largely lumber accounts), hypothecations to banks and others, and old seed grain liens of the Dominion government as at December 30, 1936, was \$434,000,000. Attempts to estimate the amount of debt owing on bank loans, farm implement purchases, gasoline and oil accounts, store bills, doctors' bills, hospital bills, borrowings on life insurance, etc., not covered by the provincial scheme, meet

⁴¹Information from A. S. Sibbald, K.C., Voluntary Adjustment of Debts: Municipal Unit Plan, Regina. Tax credits set-up against lands whose owners did not benefit by tax cancellation amounted to \$1,516,957.

great difficulties. Nevertheless, the officials administering the Voluntary Debt Adjustment scheme, after careful consideration of all evidence and materials in their files, estimate this debt at \$91,000,000 as at the end of 1936, which represents a proportion of the total indebtedness almost identical with that determined by the Farm Management Department of the University of Saskatchewan in the debt surveys.⁴²

TABLE XXIII

TOTAL ESTIMATED AGRICULTURAL DEBT OF SASKATCHEWAN AS AT DECEMBER 31, 1936

(in thousands of dollars)

	"Drought" and "marginal" areas	"Non- drought"	Total
First mortgages.....	\$95,000	\$78,000	\$173,000
Subsequent mortgages.....	20,000	17,000	37,000
Agreements of sale.....	50,000	54,000	104,000
Direct relief and agricultural aid.....			54,000*
Arrears of taxes.....	27,600	14,400	42,000
Executions.....	5,000	5,000	10,000
Mechanics' liens.....	4,000	3,000	7,000
Hypothecations to banks and others.....	2,000	2,000	4,000
Dominion seed grain liens.....			3,000
Total debt secured on land.....			\$434,000
Implement companies.....	18,000	10,000	28,000
Banks.....	12,000	6,000	18,000
Miscellaneous.....	25,000	20,000	45,000
Total other debt.....			\$91,000
TOTAL AGRICULTURAL DEBT.....			\$525,000

*Exclusive of repayments and of cancellations amounting to \$12,500,000.

The total agricultural debt of \$525,000,000 as at the end of 1936 was probably reduced by about \$88,000,000 through federal and

⁴²"According to the average of our debt studies, the unsecured debt of farm owners is 17.7 per cent of the grand total, whereas the estimates you provide are 17.4 per cent. Closer approximation can hardly be expected" (William Allen, correspondence, Nov., 1937).

provincial agencies and private adjustments in 1937. Added to this, an allowance of \$13,000,000 for tax, interest, and other debt payments, appears to be an extremely generous estimate of the amount available for these purposes out of a cash income from agricultural production of less than \$52,000,000 for the year 1937. However, it should be pointed out that against these reductions and repayments must be set interest for 1937 at 5 per cent on uncanceled tax arrears and at 6 per cent on all other debt (with the exception of relief debt against which no interest has been charged in making these calculations) amounting to \$25,000,000, municipal tax levies for 1937 of \$11,000,000; and relief advances for 1937 estimated at approximately \$15,000,000. This left a debt load of about \$475,000,000 at the end of 1937. Substantial additions were made to this sum in 1938. The interest bill on debt other than relief was again at least \$25,000,000, relief indebtedness increased by about \$50,000,000, and municipal tax levies were \$12,000,000. Alarmed by the proportions which relief had assumed, the policy of the provincial government, supported by the machinery of the Debt Adjustment Board, was to encourage farmers to retain all living and operating expenses (including seed, feed and fodder, etc.) for the coming year out of the low returns of the 1938 crop, and to pay one year's municipal taxes, before attempting to make any payments on debt account. Tax collections were equivalent to about one-half the current year's levy, repayments of relief were negligible, and other debt payments must have been very small. The partial cancellation of relief accounts for 1936-7 amounted to about \$10,000,000 and further adjustment of debts, under federal and provincial agencies and privately, are estimated at \$10,000,000. Thus, the remaining burden of agricultural indebtedness in the province of Saskatchewan at the end of 1938 must again, as at the end of 1936 and before the reductions effected under the Voluntary Debt Adjustment scheme, have been in the neighbourhood of \$525,000,000.⁴³

The provincial government's debt reduction programme brought an easing of the burden, especially as represented by old relief accounts and tax arrears, in the drought area but it left mortgage

⁴³Slightly higher estimates of farm debt are given for 1937 in *A Submission by the Government of Saskatchewan*, pp. 195-6, and for 1938 in E. C. Hope, "What the Price of Wheat Means to Western Farmers" (*Proceedings of the Conference on Markets for Western Farm Products as arranged by the Government of Manitoba in Winnipeg, Dec. 12-5, 1938* (Winnipeg, 1939), p. 150.

principal intact (unless individual creditors cared to make voluntary concessions to individual debtors) while for reduction of debts such as bank loans, chattel mortgages, implement purchases, gas and oil accounts, lumber and store bills, etc., the farmer has been forced to rely on adjustment by private agreement or through the slowly moving machinery of the Farmers' Creditors Arrangement Act. Lacking any reserves, with machinery, buildings, and household equipment all showing severe depreciation and with nearly four years' arrears of mortgage interest, taxes, and relief hanging over his head, the economic position and debt-paying capacity of the average farmer in Saskatchewan in 1939 remain vastly inferior to that of 1929.

4. FARM RELIEF

In devising ways and means of providing government assistance to farmers over the last ten years empirical methods were of necessity adopted occasioning frequent revision and readjustment. In 1929 and again in 1930 a large area in the central and south-central sections of the province, containing an agricultural population of approximately 150,000, suffered severely from drought. Responsibility for the provision of direct relief (food, fuel, and clothing) and agricultural aid (seed, feed and fodder, tractor fuel, binder-twine, and repairs to implements) was shared by the municipal authorities and the provincial government from the autumn of 1929 to the late summer of 1931. The provincial Department of Highways began in 1929 to allocate moneys to be expended on road work carried out as a relief undertaking, employment being restricted to farmers who had suffered partial or complete crop failure. The provincial government with the assistance of grants-in-aid from the federal government spent about \$4,000,000 on this type of relief road work and on colonization and secondary highways in the pioneer and unorganized districts of the north during the years 1929, 1930, and 1931.⁴ The provincial government also provided assistance in other forms such as free transportation of feed, fodder, and other requirements into the relief area but the greater part of the burden appears to have fallen on the rural municipalities, which financed the advances to farmers through the

⁴This sum does not include all highway expenditures during these years as much larger amounts were spent on the gravelling of provincial highways. See below chap. vi.

banks on the strength of provincial government guarantees,⁴⁵ since the bank indebtedness of the municipalities increased very rapidly during this period.⁴⁶

When in 1931 drought devastated a much larger area than in either 1929 or 1930 and wheat prices continued to fall, the problem became one of such magnitude that neither the municipalities nor the province were able to cope with it without federal support on a large scale. To meet the need for prompt action and to facilitate the administration of public funds, a centralized government organization, the Saskatchewan Relief Commission, consisting of a board of five members, an advisory committee of twelve, and a general manager, was established at the beginning of August, 1931, by an Order-in-Council of the provincial government, subsequently ratified by special legislation.⁴⁷ The dried-out area was zoned by the Commission according to the number of crop failures experienced. The worst area, embracing 93 rural municipalities and local improvement districts (each comprising a sub-division at least 18 miles square), which had experienced three successive crop failures, was classified as the "A" area and took the shape of a great triangle with its base on the international boundary and its apex just south of the city of Saskatoon, the eastern end of the base reaching almost to the Manitoba border and the western end almost to the Alberta border. Lateral to this central triangle was a slightly smaller area consisting of 76 municipal units which had experienced two crop failures and classified as the "B" area. An outer fringe of 69 municipal units known as the "C" area had lost one crop. The whole of the province south of a line drawn through Saskatoon was included in these areas, while in addition a relief problem had arisen in some 90 rural municipalities and local improvement districts in the northern sections of the province to which farm families had migrated from the dried-out areas carrying with them some farm and household equipment but possessing no

⁴⁵See *Statutes of Saskatchewan*, 21 Geo. V (1931), c. 62. The provincial government also guaranteed advances up to \$150 per quarter section made by mortgagees for seed grain (21 Geo. V, c. 61).

⁴⁶See the study of Municipal Finance contributed by W. W. Swanson to Mackintosh *et al.*, *Economic Problems of the Prairie Provinces*, chaps. vii-xi, in which the effects of the drought, 1929-31, are discussed. See also *Annual Reports of the Department of Municipal Affairs of the Province of Saskatchewan, 1929-30; 1930-31; and 1931-32* (Regina).

⁴⁷*Statutes of Saskatchewan*, 22 Geo. V (1932), c. 74.

means of support. Thus only a very small part of the province was free from relief problems.⁴⁸

The Dominion contributed to the province towards the relief expenditures of the Commission as follows: (1) 100 per cent of direct relief, feed and fodder costs, and grazing dues in the "A" area; (2) 100 per cent of direct relief costs for those moved from the "A" area to other parts of the province; (3) 50 per cent of direct relief costs in "B" area; (4) 50 per cent of expenditures for movement of settlers' effects and livestock from "A" and "B" areas at a reduced rate arranged with the railways; (5) 50 per cent of freight charges on shipments of food supplies and other commodities sent to the "A" area by churches and other organizations in Canada for distribution by the Commission; (6) an expenditure of \$84,886 for medical relief in the "A" and "B" area. The provincial government and the municipalities were financially responsible for all other relief expenditures by the Commission, including the provision of seed, seeding expenses, binder-twine, and harvesting repairs for the 1932 crop. The municipalities were in the main unable to contribute though they entered into agreements to reimburse the Commission for one-third of the cost of relief distributed to their respective ratepayers.⁴⁹ With nearly 50 per cent of the total rural population in receipt of government assistance in some form, the expenditures of the Relief Commission in its first year of operation amounted to \$18,740,672 (see table xxiv), of which \$9,870,916 was chargeable to the Dominion and \$8,869,756 to the province and the municipalities.⁵⁰

Governments were not left to bear the burden of relief unaided. Churches, welfare organizations, and individuals both inside and outside the province played an important part in the alleviation of distress through the distribution of hundreds of carloads of fruit

⁴⁸See C. B. Daniel, "Report of the General Manager of the Saskatchewan Relief Commission: A Summary of the Activities of the Commission, including the Full Programme for the Years ending August 31, 1932, and August 31, 1933, and a Portion of the Programme for the Year ending August 31, 1934" (Regina, June, 1934, type-written).

⁴⁹*Ibid.*, p. 3.

⁵⁰Information from the Deputy Provincial Treasurer, Regina. The \$5,669,000 received by Saskatchewan farmers under the 5 cents a bushel bonus paid by the Dominion government on the 1931 wheat crop (*Statutes of Canada*, 21-22 Geo. V, c. 60) might also be looked upon as a contribution to agricultural relief though it helped most those farmers who needed it least.

TABLE XXIV

GOVERNMENT EXPENDITURES ON RURAL RELIEF IN SASKATCHEWAN FROM
SEPTEMBER 1, 1931, TO AUGUST 31, 1938*
(in thousands of dollars)

DIRECT RELIEF	1931-2	1932-3	1933-4	1934-5	1935-6	1936-7	1937-8
Food.....	\$2,798	\$ 999	\$2,935	\$3,603	\$2,040	\$4,915	\$11,596
Fuel.....	1,538	697	1,249	1,522	1,054	1,630	3,455
Clothing.....	978	306	755	855	554	1,131	2,942
Medical aid.....	91	20	124	193	265	358	1,030
Coal for schools.....		11	38		34	91	219
Sundry†.....	23	2	361	1,011	755	964	401
Total direct relief.....	5,428	2,035	5,462	7,184	4,702	9,089	19,643
AGRICULTURAL AID							
Seed and seeding operations‡.....	5,318	735	3,735	6,566	3,347	6,758	20,000
Feed and fodder.....	5,095	520	2,985	5,917	159	5,119	7,700
Freight on feed and fodder.....	1,683		837	1,364	123	492	2,634
Freight, miscellaneous§.....	302		36	164		65	496
Grazing fees.....	117			19		3	50
Binder-twine 	798			32	171		
Grasshopper bait.....			451	51	5	46	
Total agricultural aid.....	13,313	1,255	8,044	14,113	3,805	12,483	30,880
TOTAL RELIEF.....	\$18,741	\$3,290	\$13,506	\$21,297	\$8,507	\$21,572	\$50,523

*Information on all expenditures of the Saskatchewan Relief Commission from September 1, 1931, to August 31, 1934, from the Deputy Provincial Treasurer, Regina. Information on expenditures from September 1, 1934, to August 31, 1937: direct relief (exclusive of medical aid and coal for schools) from Bureau of Labour and Public Welfare, Department of Municipal Affairs, Regina; on medical aid and coal for schools from the Provincial Treasurer, Regina; on agricultural aid from Deputy Minister of Agriculture, Regina. Information on expenditures for relief year 1937-8 from the Deputy Provincial Treasurer, Regina.

†Includes: in 1931-2 and 1932-3, chiefly shelter; in 1933-4, direct relief for month of August, 1934; in 1934-5, 1935-6, and 1936-7, all direct relief in the form of food, clothing, and fuel in northern relief area (and, for 1934-5, in 20 local improvement districts in the south-west).

‡Includes seed, tractor fuel, machinery repairs, formaldehyde, gopher poison, etc.; approximately \$650,000 in 1934-5 and all advances under this heading in subsequent years were in the form of bank loans to the municipalities guaranteed, in whole or in part, by the provincial and federal governments.

§Includes freight on settlers' effects, livestock, haying outfits, etc., and, in 1936-7, \$20,327 for processing livestock.

||Includes harvesting repairs in 1934-5 and 1935-6.

and vegetables, clothing, fuel, and other necessities. In 1931 when distribution was handled through the Commission assisted by local voluntary committees, 249 carloads, consisting largely of vegetables, fruit, and clothing, were received for distribution.⁵¹ In 1932 the voluntary agencies decided to pool their efforts and organized the Saskatchewan Voluntary Rural Relief Committee to work in co-operation with the Commission. The demands to be met were much lighter than in the previous year but the Committee collected and distributed 50 carloads of vegetables, fruit, and clothing, and 3 carloads of feed and fodder, together with 64 carloads of coal donated by the mine operators of the province for distribution among the needy schools of the relief area. Widespread distress followed the short crop of 1933 so that during the winter of 1933-4 the Voluntary Relief Committee distributed 279 carloads of vegetables, fruit, and clothing, 6 carloads of flour and feed grain, and 60 carloads of coal for schools. Faced by an even worse situation in the winter of 1934-5 the activities of the Committee were extended; 329 carloads of vegetables and fruit were distributed, 100 cars of coal for schools, and upwards of 60 tons of clothing.⁵² Following further crop failures over wide areas in 1935, 1936, and 1937 the Committee, the Red Cross, and other private relief agencies re-doubled their efforts, and in the relief season 1937-8 the Committee collected and distributed 771 carloads of vegetables, fruit, canned goods, blankets, and clothing.⁵³

Advances made by the Relief Commission in 1931 and subsequent years were (with the possible exception of medical assistance) in form, at least, loans. A straight promissory note was taken for direct relief advances but a lien, acting as a legal first

⁵¹See Daniel, "Report of the General Manager of the Saskatchewan Relief Commission", p. 16. Of the 249 carloads, the United Church donated 135; the Roman Catholic Church, 62; the Presbyterian Church, 10; the Lutheran, 8; the Moravian Church, 3; while other organizations and individuals contributed the remaining 31.

⁵²Information by correspondence from the Rev. Dr. George Dorey, secretary of the Saskatchewan Voluntary Rural Relief Committee, Regina, July, 1935. In addition to the activities outlined above, the Committee received between September 1, 1932, and July 12, 1935, cash contributions of \$32,235 of which \$22,000 came from the provincial government. "The government money was used to purchase bedding and clothing (mostly children's clothing). Numerous cases of distress for which no provision was made by the government have been taken care of by the Committee."

⁵³See also *A Submission by the Province of Saskatchewan*, p. 183.

charge on the crops of the individual in the year of the advance and the succeeding year, was taken as security for seed, feed and fodder, tractor fuel, binder-twine, and repairs.

In deciding to adopt this policy [wrote the general manager of the Commission in 1934] the Commission was influenced by the fact that the great majority of those in need of relief were not bankrupt, insofar as their assets and liabilities were concerned, or paupers or indigents in the ordinary sense. The problem in Saskatchewan presented an entirely different aspect from that in other provinces, in that while the other provinces were suffering from a world-wide economic depression, Saskatchewan was, in addition, experiencing consecutive crop failures over an extensive area as a result of one of the worst droughts in history and a great many of our best farmers were entirely penniless, insofar as immediate revenue was concerned. . . .

It was felt that an undertaking to repay the amount of relief received should be required from each recipient because many of our farmers, while deprived of revenue because of consecutive crop failures and also unable to dispose of any of their assets or chattel property owing to the lack of market, could reasonably be expected, if given assistance for a period, to regain a position which would enable them to repay the amount of the advances received. In this sense the Commission might be regarded as supplying a short term credit to relieve distress among those in need for what was expected to be a short period. Consideration was also given to the frequently expressed opinion that to take an obligation from the recipient for repayment of the cost of assistance received would enable him to maintain his self-respect and, it was felt that knowing such an undertaking would be required, many who were in real need, but who would to the detriment of themselves and their families prefer to suffer in silence from the lack of necessities rather than seek relief in the ordinary way, would without embarrassment feel able to apply for such help as they required under these circumstances.

While the lengthy period of depression and drought, combined with grasshopper infestation, has so materially altered the situation that the Government has expressed the intention of giving immediate consideration to the cancellation of direct relief obligations, either in whole or in part, the Commission considers that this was the proper course to pursue in view of the conditions existing and the difficulty of designing methods for their alleviation.⁴

It had been confidently anticipated at the inception of the Commission that one year's operations would take care of the

⁴Daniel, "Report of the General Manager of the Saskatchewan Relief Commission", pp. 7-8. "The Commission has never attempted to enforce the collection of direct relief advances, other than to send a statement of account to the individual or the provision of relief work, which latter was applicable only to Northern areas" (*ibid.*, p. 19). Relief Commission notes to the amount of \$12,506,723 on the 1931-2 advances were cancelled by the Dominion and provincial governments in 1935. Cash repayments of relief advances 1931-4 amounted to approximately \$2,000,000.

situation, but although a fair crop was harvested over most of the province in 1932 prices continued to fall and it was necessary to carry on, with the assistance of municipal councils in field administration, a reduced programme through the following year. The total cost for 1932-3 was \$3,287,665, to which the Dominion government contributed \$713,405, while the province assumed responsibility for the balance (including nearly \$500,000 chargeable to the rural municipalities), amounting to \$2,574,250.

The early promise of 1933 with respect to both crop yields and prices was not fulfilled. A considerable section of the drought area was north and west of that which had been so severely hit in 1930 and 1931 and had experienced at least fair crops for several years so that the amount of government relief in this section should have been small, but four years of disastrous prices had exhausted reserves and one even partial crop failure meant complete destitution. The winter of 1933-4 found nearly one-third of the agricultural population of the province receiving government assistance and the Commission's bill for the year's operations amounted to \$13,506,492. The Dominion contribution was \$2,064,482 and the total provincial advance, including \$2,431,371 chargeable to the rural municipalities, \$11,442,010.

Following a change of government in the province in the summer of 1934, the Relief Commission was replaced by a less highly centralized system and relief assistance was divided into two separate categories, direct relief and agricultural re-establishment. The Bureau of Labour and Public Welfare in the Department of Municipal Affairs was charged with supervision of direct relief, the Department of Agriculture with agricultural re-establishment, and the municipalities were called upon to play a much more active part in the administration of each type of assistance. The principle of treating all relief advances as loans was continued, security being taken by the municipalities in the form of demand promissory notes bearing interest at 5 per cent and liens creating legal charges against the crops and lands of the recipient.⁶⁵

The cumulative effects of continued adverse climatic conditions

⁶⁵See *Statutes of Saskatchewan*, 25 Geo. V (1934-5), c. 33, c. 34, c. 37; 1 Edw. VIII (1936), c. 44, c. 48; 1 Geo. VI (1937), c. 33, c. 36; 2 Geo. V (1938), c. 33, c. 34. The province also continued to guarantee advances made by mortgagees for agricultural aid up to \$150 (in 1937 and 1938 up to \$200) per quarter section (25 Geo. V, c. 61; 1 Edw. VIII, c. 83; 1 Geo. VI, c. 63; 2 Geo. VI, c. 59). But see above sec. 3 for cancellation of all government advances prior to January 1,

and low prices brought an increase in the rural relief bill for 1934-5 above even that for 1931-2. Direct relief provided in approximately 200 municipalities and local improvement districts in the drought area cost \$6,500,000, while similar assistance in the northern relief area cost \$690,083.⁵⁶ Expenditures on agricultural aid or re-establishment were in excess of \$14,000,000. Of these costs the Dominion assumed responsibility for advances amounting to \$9,000,000 under the provisions of the Relief Acts of 1934 and 1935,⁵⁷ the balance of more than \$12,000,000 being chargeable to the province and municipalities.⁵⁸

In 1935 the drought was definitely broken except for a strip about 50 miles wide extending north some 200 miles along the Alberta border, but in the south-east rust destroyed the wheat crop over an area nearly three times as large, so that it was necessary to provide direct relief over a territory slightly larger than in 1934-5. Government assistance was given in some 225 rural municipalities and local improvement districts, the municipalities accepting responsibility for one-third of the cost, although a large number were unable to make any contribution to immediate expenditures. With good gardens and feed for livestock over most of the relief area, expenditures of slightly less than \$8,000,000 divided almost evenly between direct relief and agricultural aid (largely seed wheat) were lower than the previous year. In the northern relief area the cost of direct relief during the relief year 1935-6 rose to \$793,028.⁵⁹ The Dominion government made no direct contribution to rural relief expenditures in this year,⁶⁰ the total burden of

1935, and *Statutes of Saskatchewan*, 2 Geo. VI (1938), c. 38, for the cancellation of charges for direct relief and winter maintenance amounting to approximately \$10,000,000 for the relief year 1936-7 in a large number of specified municipalities.

⁵⁶Information from Bureau of Public Welfare and Northern Settlers' Re-establishment Branch, Department of Municipal Affairs, Regina.

⁵⁷See *Report of the Dominion Commissioner of Unemployment Relief, March 31, 1936* (Ottawa, 1936), pp. 4-5; and *Budget Speech delivered by the Hon. W. J. Patterson in the Legislative Assembly of Saskatchewan, March 23, 1937* (Regina, 1937), p. 10.

⁵⁸This amount should be reduced by some portion of the \$2,400,000 paid by the Dominion government in the form of "grants-in-aid" for urban and rural relief purposes during the relief year 1934-5.

⁵⁹Information by interview, Commissioner, Northern Settlers' Re-establishment Branch, Department of Municipal Affairs, Regina, Oct., 1937.

⁶⁰Information by interview and correspondence, H. Hereford, Dominion Commissioner of Unemployment Relief, Ottawa; and N. C. Allen, Chief Treasury Officer, Departments of Labour and Agriculture, Ottawa.

rural relief, amounting to more than \$8,500,000, being borne by the province and the rural municipalities.⁶¹

In 1936 the recurrence of severe drought, affecting the greater part of the province and forcing one-third of the rural population on relief again, was recognized as a national emergency, and the Dominion government agreed to meet 100 per cent of the costs of direct relief and of winter maintenance for livestock from September 1, 1936, to March 31, 1937, in the federally defined "drought area" of 149 rural municipalities and local improvement districts, no repayment by recipients being required. Provincial advances for seed, feed, tractor fuel, and implement repairs for seeding operations in the spring of 1937, creating the usual charges against the crops and lands of recipients, were in the neighbourhood of \$6,758,000. The federal agreement with respect to direct relief in the drought area was continued and the complete failure of crops and pastures over most of the province in the summer of 1937 necessitated emergency grants to save livestock, and additional expenditures for direct relief as distress increased. The total cost for the relief year ending August 31, 1937, was in excess of \$8,000,000 for direct relief in the drought area with an additional \$12,483,000 for agricultural aid plus a further sum of \$1,030,976 for government assistance in the northern relief area. The Dominion government contributed \$5,572,935 toward direct relief and \$2,612,779 toward agricultural aid,⁶² leaving the balance of approximately \$13,400,000 to be carried by the province and the rural municipalities.⁶³

By the autumn of 1937 the completeness of the crop failure in that year had placed two-thirds of the rural population on the relief rolls and 290 of the 302 rural municipalities of the province had sought assistance from the government. The federally defined "drought area", in which the entire cost of direct relief and winter maintenance for livestock was a charge on the federal government, was enlarged to include 150 rural municipalities and 20 local improvement districts together with the towns and villages within

⁶¹This amount should be reduced by some portion of the \$3,428,000 paid by the Dominion government in the form of "grants-in-aid" for urban and rural relief purposes during the relief year 1935-6.

⁶²See above, note 60.

⁶³This amount should be reduced by some portion of the \$3,024,250 paid by the Dominion in the form of "grants-in-aid" for urban and rural relief purposes during the relief year 1936-7.

this area. The Dominion government also made provision for the purchase and distribution of 782 cars of fruit, vegetables, fish, beans, and cheese to supplement food supplies and food-relief schedules in the drought areas,⁶⁴ and, since it was impossible to secure enough feed and fodder to carry all livestock through the winter, financed the sale or removal to feeding grounds outside the province of nearly half a million head of cattle from the drought areas. The provincial government had to take care of direct relief and winter maintenance in a further 140 rural municipalities and in the 62 local improvement districts of the northern fringe, receiving a special grant of \$1,000,000 from the federal government to cover part of the cost. In the spring of 1938 it was necessary for the provincial and municipal governments to arrange for the financing of the greater part of the seeding programme. With the assistance of the Dominion government seed, feed, tractor fuel, and implement repairs to the value of approximately \$20,000,000 were distributed to farmers. Direct relief and agricultural aid had to be continued on a reduced scale through the summer months until the harvest of 1938. The bill for rural direct relief and agricultural aid for the relief year ending August 31, 1938, was in the neighbourhood of \$50,520,000 of which approximately \$19,640,000 might be classified as for direct relief and \$30,880,000 for agricultural aid. The Dominion government contributed \$13,301,000 toward direct relief and \$9,300,000 toward agricultural aid, leaving a balance of approximately \$27,920,000 to be carried by the province and the rural municipalities.⁶⁵

The short crop of 1938 made the continuation of governmental assistance, particularly in the form of direct relief, necessary on a reduced scale over most of the province. The Dominion government undertook to provide \$4,500,000 as its contribution to the 1938-9 relief programme and provincial government officials are hopeful that the provincial contribution will not exceed a similar figure. Provincial and municipal support for the seeding programme in the spring of 1939 may well add another \$3,000,000 to these amounts.

Practically all the money to finance the \$135,000,000 of rural

⁶⁴See below, chap. vii, sec. 2.

⁶⁵This amount should be reduced by some portion of the \$2,760,000 paid by the Dominion in the form of "grants-in-aid" for urban and rural relief purposes during the relief year 1937-8.

relief expenditures⁶⁶ in the seven years 1931-8 came from the federal Treasury, since the revenues of the province shrank rapidly with the collapse of wheat prices and soon proved inadequate to meet even the ordinary expenditures of government, despite the drastic curtailment of educational grants and social services. The relief of unemployment in urban centres added to the strain on provincial finances, and further outside borrowing became impossible as deficits accumulated and the public debt nearly trebled.⁶⁷ Total relief expenditures by the province since September 1st, 1929, amounting to \$153,437,000 at April 30, 1938, were far in excess of the *total* ordinary revenues of the province for the same period. Of this sum cash advances made by the Dominion government under relief legislation over the same period totalled \$131,360,000 of which approximately \$61,990,000 was by way of contribution (or subsequent cancellation of relief loans) and the balance by way of loan.⁶⁸ These amounts have been substantially increased by further advances.

⁶⁶In addition to this sum the province guaranteed advances made by mortgagees for seeding supplies, etc., amounting to approximately \$2,448,000 (net) and has assumed direct liability for provincially guaranteed municipal bank loans made for similar purposes amounting to \$5,283,104.

⁶⁷The public debt of the province increased from \$65,742,143 as at September 1, 1929, to \$177,552,669 by the end of 1935. See *A Submission by the Government of Saskatchewan*, pp. 19-46 and appendix A; *A Report on the Financial Position of the Province of Saskatchewan*, *passim*; and Budget Speeches of Provincial Treasurers, 1936, 1937, and 1938.

⁶⁸Information from the Deputy Provincial Treasurer, Regina.

CHAPTER VI

PROVINCIAL AND MUNICIPAL INSTITUTIONS

It is not unlikely that the physical, economic and population characteristics of Saskatchewan make it necessary for larger per capita expenditures on education and health than elsewhere, if adequate standards are to be maintained.—
BANK OF CANADA.

Many of the pioneers of twentieth-century prairie settlement came from communities where the conventional standard of living assumed the existence of educational and medical facilities and of roads and communications. But the rapidity of agricultural expansion and a thinly scattered rural population made the provision of such facilities both difficult and expensive, while the impatience of the new wheat-producing areas made it necessary for public bodies to assume responsibility for their provision and to secure the necessary capital. Pressure on the provincial government was a factor in the early establishment of a system of rural municipal government. The resulting decentralization introduced important elements of flexibility and made possible a sharing of the heavy burden of providing community services. Although pronounced variations in the taxable capacity of different municipal units made for unequal distribution of the burden and sharp fluctuations in income from wheat rendered periods of strain inevitable, the advance was rapid and continuous down to 1929. Since that time depression and adverse climatic conditions throughout the entire wheat belt have made the maintenance of ordinary standards impossible and brought threatening and unmistakable signs of disintegration.¹

¹For a detailed account of rural local government and a discussion of the problems of provincial and municipal finance in Saskatchewan, see *A Submission by the Government of Saskatchewan to the Royal Commission on Dominion-Provincial Relations (Canada, 1937)* (Regina, 1937), pp. 19 ff., 273 ff., 306 ff., 337 ff. See also W. A. Mackintosh et al., *Economic Problems of the Prairie Provinces* (Toronto, 1935), chaps. vii-xi; *Report of the Commission of Inquiry into Provincial and Municipal Taxation to the Government of the Province of Saskatchewan, 1936* (Regina, 1936); *Annual Reports of the Department of Municipal Affairs of the Province of Saskatchewan, 1920-38*; *Report on the Financial Position of the Province of Saskatchewan, 1937* (Ottawa, Bank of Canada, 1937); W. J. Wainess, "Problems of Public Finance in the Prairie Provinces" (*Canadian Journal of Economics and*

1. THE EDUCATIONAL SERVICES

Primary schools were the first concern of prairie settlers. Legislation made the organization of rural school districts a fairly simple matter, merely requiring (1) the proposed school district should not be more than 5 miles in length or breadth nor exceed an area of 20 square miles, (2) four persons resident within the proposed district and liable upon its organization, to assessment for taxes, (3) twelve children between the ages of 5 and 16 years inclusive actually residing in the proposed district.² Apart from a

Political Science, vol. III, Aug., 1937, pp. 355-69). The ordinary rural municipality is approximately 18 miles square containing as a rule not less than 9 townships or 324 square miles. The reeve, who acts as chairman of the Municipal Council, is elected annually by the municipality at large. Councillors are elected, one from each of the 6 geographical divisions into which the municipality is divided, for a 2 year term, 3 retiring each year; the Council appoints a secretary-treasurer, auditor, and assessor. The construction and maintenance of roads and bridges; the protection of crops and other property; the supervision of public health and sanitation; the occasional provision of medical services and the care of indigents, are only a part of the Council's duties and normally absorb less than one-third of the revenues which it collects. The role of the Municipal Council as tax-gatherer is important for it "may annually have to collect taxes for, and make disbursements to 20 or 25 school districts, a half dozen or more rural telephone companies, the Saskatchewan Municipal Hail Association, a Union Hospital Board, the Minister of Highways, and the Provincial Treasurer". Areas in which the density of population does not warrant organization of a municipality are administered directly by the Department of Municipal Affairs as Local Improvement Districts. In 1938 there were 302 rural municipalities and 84 local improvement districts in the province, 20 of the latter being situated in the south-west and the remaining 64 on the northern pioneer fringe.

²*Revised Statutes of Saskatchewan*, 1909, 9 Edw. VII, c. 100, s. 12. The School Act contains provision for the establishment of separate schools by a minority of the ratepayers of a district whether Protestant or Roman Catholic in which case such ratepayers are liable only to assessment of such rates as they impose on themselves, but the heavy burden involved has discouraged the establishment of rural separate schools and the last rural separate school district was disorganized in 1930. In 1938 there were 5,151 school districts in the province, of which 5,120 were public and 31 separate (24 Roman Catholic and 7 Protestant). On separate schools in Saskatchewan, see G. M. Weir, *The Separate School Question in Canada* (Toronto, 1934), chaps. vi, vii, ix, xiii, and appendix; and C. B. Sissons, *Bi-Lingual Schools in Canada* (Toronto, 1917), chap. v. On the special educational problems arising out of large non-Anglo-Saxon communities in Saskatchewan, see E. H. Oliver, *The Country School in Non-English Speaking Communities in Saskatchewan* (Regina, 1915); J. T. M. Anderson, *The Education of the New Canadian* (New York, 1918); Robert England, *The Central European Immigrant in Canada* (Toronto, 1929), chap. v; C. H.

relatively small operating grant from the provincial government, financial responsibility for construction and operation fell upon the taxpayers of a given school district, the trustees of each district setting the tax-rate and the rural municipality acting as tax-collector.³ Construction of the typical one-roomed frame school-house was financed by the issue of debentures to be retired in 15 years through tax levies on real property.⁴ The organization of rural school districts proceeded rapidly after 1905, so that by 1914 schools had been built and equipped to take care of elementary education over most of the prairie region. After 1914 construction continued at a greatly reduced rate and heavy debenture issues in the late twenties were associated largely with the reconstruction, enlargement, or improvement of existing schools.⁵

In the period of marked expansion the supply of well-trained teachers failed to keep pace with the demand though large numbers were attracted from other provinces and Great Britain, and teachers

Young, *The Ukrainian Canadians: A Study in Assimilation* (Toronto, 1931), chap. viii; C. A. Dawson, *Group Settlement: Ethnic Communities in Western Canada* (Toronto, 1936), parts I, II, and IV.

³The territory of a rural school district is not restricted to any one rural municipality and a school located near the boundary of one municipality frequently serves some of the taxpayers of, and draws part of its support from, one or more neighbouring rural municipalities.

⁴"In recent years one-room schools have cost all the way from \$2,500.00 to \$4,500.00 to build and equip, depending upon the type of construction. In a district with an assessment of, say, \$175,000.00 and a debenture of \$3,500.00 at 7% interest with repayment spread over 15 years, this would mean a tax rate of approximately 2.19 mills. The interest rate on debentures has been comparatively high, doubtless too high when the nature of the security is considered. Most districts have paid from 7% to 8% although a few rural school debentures have sold at around 6%" (*Report of the Committee on School Finance and School Grants, 1933*, Regina, 1933, p. 9).

⁵See *Annual Reports of the Department of Education of the Province of Saskatchewan, 1905-30*. Construction of new rural schools through the twenties averaged about 50 a year, chiefly in the northern part of the province, as against about 250 a year during the period of prairie expansion from 1905-14. In 1925 a government correspondence school operated from Regina was organized to give primary school instruction to children in remote or sparsely populated parts of the province where school districts had not been organized. Enrolment increased from 72 in 1925 to 950 in 1934 and a check in the latter year showed that approximately 67 per cent of the pupils lived on the northern fringe of settlement, about 25 per cent on the ranching frontier south-west of Maple Creek, while the remaining 8 per cent consisted of children whose health rendered attendance at the local school impossible and of adults desiring elementary education.

holding third class and provisional certificates and possessing little or no professional training were to be found in the majority of rural schools. Since 1920 the trend in the teachers' training schools established and maintained by the provincial government at Regina, Saskatoon, and Moose Jaw has been toward insistence on higher academic qualifications in candidates, combined with a gradual lengthening of the period of training, while extra-mural and summer school courses of the provincial university have enabled teachers holding lower grade certificates to improve their professional standing, so that the proportion of rural teachers holding first and second class certificates has steadily increased. In 1920 less than 10 per cent of rural teachers held first class certificates, 45.2 per cent second class, and 45 per cent third class and provisional certificates, while by 1930, 26 per cent held first class, 73.6 per cent second class, and third class and provisional certificates had practically disappeared; in 1934 for the first time more than half (52.7 per cent) of all rural teachers were reported as holding first class certificates⁶ though it could still be said that, compared with urban teachers, "with some exceptions rural school teachers, because they are usually somewhat immature, inferior in experience and education and without adequate supervision, leave much to be desired".⁷

A scattered, heterogeneous population, scarcity of farm labour, and long severe winters all made for low enrolment and attendance and a short school term for rural schools down to the end of the war; a large number of rural schools were open only during the summer months and a relatively small part of the rural school population completed the eight primary school grades.⁸ A tightening up of compulsory school-attendance regulations was accompanied by a lengthening of the school term, and by 1926 the summer school had virtually disappeared.⁹ From 1905 to 1917 the average

⁶From statistical information supplied by the Deputy Minister of Education, Regina. Beginning in September, 1936, grade XII standing became the minimum scholastic requirement for entrance to a normal school, upon successful completion of the 38 week course the candidate to receive a first-class certificate.

⁷*Report of the Committee on School Finance and School Grants, 1933*, p. 10.

⁸See H. W. Foght, *A Survey of Education in the Province of Saskatchewan, Canada: A Report to the Government of the Province of Saskatchewan* (Regina, 1918).

⁹See W. B. Hurd and T. W. Grindley, *Agriculture, Climate and Population of the Prairie Provinces of Canada: A Statistical Atlas Showing Past Development*

rural school had operated less than 160 days with an average daily attendance of less than 55 per cent of the pupils enrolled. By 1930 rural schools were averaging over 200 teaching days a year and the average daily attendance of pupils had increased to 70 per cent.¹⁰

The attendance record has continued to improve, but after 1930 depression quickly forced a reduction in the numbers of teaching days, especially in the prairie region.

Whereas in 1930-31 the average period of operation of rural schools was 201.66 days and the average for all schools 201.64, the figures for 1931-32 are 190.46 and 190.86 respectively. It is unnecessary to dwell on the cause for this decrease. Some districts were without funds to operate for the full year. Other districts deemed it advisable to close the school during the winter when the cost of operation and of providing children with suitable clothing would be highest. Perhaps a school year of 180 days or over, under existing conditions, should be looked upon as fairly satisfactory. . . .¹¹

The operating record would have been still more unfavourable in

and Present Conditions (Ottawa, 1931): "Settlement in this province is scattered over an area almost twice as large as that occupied by the rural population of Ontario, and between 1911 and 1926, the population increased 66 per cent. In the same period the number attending school multiplied three fold. In 1911, about as many children were at school as in the province of New Brunswick; by 1925, the total enrolment was greater than in the whole of the Maritimes. Increased regularity of attendance and a lengthening of the average number of days of the school term have gone hand in hand with the establishment of new schools and the enlarging of the old" (p. 99). The proportion of farm children 7 to 14 years not attending school declined from about 36 per cent in 1911 to less than 9 per cent in 1926.

¹⁰See *Annual Reports of the Department of Education of the Province of Saskatchewan*, 1906-30. The average rural school term of 201.6 days in 1930 compared favourably with the average urban school term of 202.1, but the average daily attendance of urban schools was considerably higher at 79.8 per cent. For the last 15 years the number of children enrolled in the average rural school has been approximately 29, although in 1930 it was reported that 381 schools had an enrolment of less than 10 each. The attendance record for urban schools is about 10 points higher than rural.

¹¹*Annual Report of the Department of Education*, 1932, p. 35. Separate statistics for the prairie region are not available but the Department of Education *Reports* provide the following table on the operation of all rural schools:

	1930-1	1931-2	1932-3	1933-4	1934-5	1935-6	1936-7
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
200 days and over	72.1	39.8	38.7	41.0	28.3	35.3	34.2
180-99 days.....	24.0	48.1	53.2	52.0	65.3	61.7	62.2
160-79 ".....	2.0	8.6	5.5	4.6	4.4	1.7	2.6
140-59 ".....	0.6	2.0	1.1	1.1	0.9	0.3	0.3
Less than 140 days	1.3	1.5	1.5	1.3	1.1	1.0	0.7

1931-2 and succeeding years had it not been for the activities of the Saskatchewan Relief Commission, the donations of provincial mine operators in providing coal,¹² government loans to school districts, and the sacrifices made by teachers.

The sharp decline in revenues from wheat was reflected immediately in the finances of rural school districts as proceeds from local taxation fell away. With the development of the country the values of taxable property had increased and the proportion of school revenues derived from the provincial grants for school operation and other purposes connected with construction and equipment¹³ had tended to decline but with the depression this trend was abruptly reversed. Financial support from the provincial government showed successive reductions after 1929, and following a cut of one-third made effective January 1, 1932, the government operating grant for a one-room rural school was only \$1.00 per teaching day, but revenues from local taxation showed a greater loss (see table xxv) so that rural school-district receipts from these combined sources declined 56 per cent between 1929 and 1936 although the number of rural school districts in operation increased from 4,200 to 4,426 in the same period. Beginning July 1, 1937, the operating grant was restored to \$1.50 per teaching day but this proved insufficient to offset a further decline in revenues from local taxation resulting from complete crop failure over the entire prairie wheat belt.

A measure of rapid adjustment to altered conditions was made possible through shifting a large part of the financial burden of the school districts to the shoulders of the rural teachers. This process was rendered easier by the absence of alternative opportunities, by the increased supply of new teachers from the provincial normal

¹²See above, chap. v, sec. 3. Relatively few schools have been closed. In 1938, 234 districts made arrangements for conveying their children to other schools, or for their instruction through the Government Correspondence School. "Irregular attendance is still to a great extent the result of unavoidable causes such as sickness, inclement weather and impassable roads. The department attempts to reduce to a minimum irregular attendance from such avoidable causes as truancy, parents' indifference and work at home" (*Annual Report of the Department of Education, 1935*, p. 8).

¹³There have been varying small grants by the provincial government up to \$100.00 toward construction of a rural school, \$200.00 toward construction of a teacher's residence, with smaller sums for library books, science equipment, and facilities for providing noon lunch for school-children.

TABLE XXV

CHIEF SOURCES OF REVENUE FOR RURAL SCHOOL DISTRICTS IN SASKATCHEWAN,
1929-37*

(in thousands of dollars)

Year	Receipts from local taxation		Government grant		Total chief sources
1929.....	\$6,145	79.5%	\$1,580	20.5%	\$7,725
1930.....	5,531	79.7	1,411	20.3	6,942
1931.....	3,762	74.9	1,271	25.1	5,033
1932.....	2,876	74.5	985	25.5	3,861
1933.....	2,533	75.7	813	24.3	3,346
1934.....	2,476	74.3	852	25.7	3,328
1935.....	2,464	73.8	872	26.2	3,336
1936.....	2,549	74.1	892	25.9	3,441
1937.....	1,676	63.2	979	36.8	2,655

*Compiled from *Annual Reports of the Department of Education, 1929-37.*

schools, and by the return to the profession of former teachers such as married women whose husbands were in financial straits as a result of the depression.¹⁴ The Assistant Deputy Minister of Education wrote in 1932:

Just where the depression has struck hardest will be apparent from the fact that in two years, namely, from 1930 to 1932, the amount actually paid to rural school teachers fell over \$2,000,000.00 or about 45% while the amount paid teachers in village and town districts fell \$800,000.00 or 35% and the salaries of city teachers were reduced about \$160,000.00 or slightly less than 15%. The sacrifices made by rural school teachers particularly, in order that the rural schools might remain open, are well known. It should be said that there was great lack of uniformity in the salaries of rural teachers. There was no systematic reduction. The average reduction, as stated, was about 45% but the reduction in some cases greatly exceeded this.¹⁵

Further reductions in subsequent years are indicated by salary averages and total payments. The average salary for all grades of teachers, male and female, in rural schools in 1930 was \$1,030; in 1931, \$862; 1932, \$618; 1933, \$506; 1934, \$467; 1935, \$430;

¹⁴One result of the pressure upon the teacher's standard of living has been the formation of the Saskatchewan Teachers' Federation in which, beginning in 1935, membership became a condition of every teacher's employment, fees being deducted from the provincial government grants to school districts and remitted to the Federation by the Department of Education. See *Statutes of Saskatchewan*, 25 Geo. V (1934-5), c. 53, and 1 Geo. VI (1937), c. 57. One aim of the Federation is the establishment of a statutory minimum salary.

¹⁵*Annual Report of the Department of Education, 1932*, p. 36.

1936, \$438.¹⁶ In 1930 salary payments were \$4,531,819 as against \$2,011,220 in 1936, a reduction of 56 per cent. In the latter year, salary arrears were reported amounting to \$937,594¹⁷ and in 1938 were probably in excess of \$1,500,000.

Most of the unpaid salaries is owing to rural teachers in the drought area who have been receiving the lowest salaries, since "in many of these districts the school boards have had no money except the school grant, which amounts to \$1 per day, and the teachers have received only the school grant and their board, and in some instances only the school grant, for their services".¹⁸ The hardships undergone by the teachers in such districts have been increased by the general inability to discount school-district notes, even at 50 per cent, and in some cases married teachers have been forced to seek relief in the form of food, clothing, and fuel through the rural municipality, the latter taking an order on the teacher's salary for the relief advanced.¹⁹ An inspector of rural schools reported in 1934 that "teachers, although they have struggled on without complaint, are beginning to show the effects of the fight in their morale, in their attitude and general outlook on life".²⁰

Inspectors' reports also reveal the rapid deterioration of school buildings, equipment, and libraries: "The school buildings are

¹⁶The 1930 figure is given in the *Report of the Committee on School Finance and School Grants, 1933* (p. 9); the figures for subsequent years were compiled by the secretary of the Saskatchewan Teachers' Federation from the records of the Department of Education. The corresponding salaries for all elementary urban teachers were: 1930, \$1,300 (estimated); 1931, \$1,173; 1932, \$1,006; 1933, \$860; 1934, \$812; 1935, \$850; 1936, \$914. An analysis in 1934 showed that the largest number of rural teachers' contracts were for \$375 per annum in that year as against \$975 in 1930.

¹⁷See *A Submission by the Government of Saskatchewan*, p. 278. A special appropriation of \$200,000 to be paid to teachers holding school district notes was voted in 1937 and a similar sum again in 1938.

¹⁸*Annual Report of the Department of Education, 1935*, p. 33; see also *ibid.*, 1936, p. 27 and *ibid.*, 1937, pp. 22-3.

¹⁹In the summer of 1935 the secretary-treasurer of a rural municipality in central Saskatchewan told the writer that this procedure was being followed with respect to a number of rural teachers in that municipality. See also evidence of the Hon. R. J. M. Parker, Minister of Municipal Affairs, *Report of Proceedings of the Royal Commission on Dominion-Provincial Relations, 1937* (Dec. 10, 1937): "The teachers are unable very often to carry on. It was not our intention to put them on relief, but in hundreds of cases they are unable to carry on, on the salary they are getting" (p. 1370).

²⁰*Annual Report of the Department of Education, 1934*, p. 38.

beginning to look very dilapidated. They suffer from lack of paint; many window panes are broken, patched or closed with cardboard; some of the classroom floors are very worn; outhouses and barns are in need of repairs; but due to lack of funds, nothing can be done."²¹ And again: "Both buildings and equipment show depreciation with no probability of improvement in sight. There is difficulty in providing even the most necessary items, such as chalk, erasers, and a usable blackboard surface. . . . School libraries are falling into a very unsatisfactory condition. Many of the books are badly worn from use and the range of material offered is very limited. Supplementary readers and authoritative references are largely absent. Very few additions have been made for several years."²² Fully two-thirds of the rural schools in the prairie region had no debenture indebtedness at the beginning of the depression²³ but in the normal course of events borrowings for rebuilding, repairing, and improving old schools would have been quite heavy. Economic conditions have made school boards wish to defer borrowing, and defaults by most of the school districts with outstanding debentures have discouraged investors.²⁴

²¹*Ibid.*, p. 43.

²²*Ibid.*, p. 44; see also 1935, pp. 47-9; 1936, p. 26; and *A Submission by the Government of Saskatchewan*, pp. 277-80.

²³At the end of 1935 approximately a thousand rural school districts were in default with overdue debentures amounting to \$1,265,037. The amount due to rural school districts on account of unpaid taxes was \$5,485,720, but the larger part of this amount has since been cancelled under the government's debt adjustment programme. At the end of 1933 the unpaid debenture debt of all rural school districts in the prairie region was only a little over \$2,000,000, of which approximately \$600,000 was in default; the total unpaid debenture debt of Saskatchewan rural schools at this time was \$3,418,591, of which \$793,581 was in default (see *Report of the Debt Survey Committee, Province of Saskatchewan, 1934*, Regina, 1935, part II, pp. 123-51). For a discussion of the problems arising out of the demand for schools in the north by settlers from the dried-out areas see below, chap. viii, sec. 1.

²⁴"Whereas for some years prior to 1931 school debentures registered amounted to about \$1,500,000 annually, since that year the annual amount has been quite small. In 1933 it was \$21,725 and in 1934 \$47,983.67. The decrease is due to the reluctance of school districts to incur indebtedness under the unfavourable conditions that have existed in recent years, and to the absence of a market for school debentures. It seems clear, however, that steps to check the deterioration of school property must be taken soon. Many repairs and improvements to schoolhouses cannot be much longer delayed" (*Annual Report of the Department of Education, 1934*, p. 32). Debentures registered amounted to \$75,391 in 1935; \$121,207 in 1936; and (exclusive of refundings) \$70,600 in 1937.

Even in normal times the inflexible nature of flat-rate government operating grants bearing no relation to local need made for very unequal assessments and tended to penalize alike taxpayers, teachers, and pupils in economically weak districts, but crop failures and depression have emphasized still further the defects of a decentralized system of primary education with small administrative units depending largely on local property taxation for revenues.²⁵ In 1936 the Saskatchewan Royal Commission on Taxation recommended "amendment of The School Grants Act to provide for a supplementary grant to rural schools varying inversely with the aggregate assessed valuations of the school

²⁵"The past few years of economic stress have served to emphasize the inadequacy of the small school district as a financial unit. In times of depression the rural municipality is likewise too small to undertake the financing of the schools within its borders. During 1934 the government, through the Department of Education, extended loans to approximately 660 school districts in some 90 municipalities because of the inability of the rural councils and school boards to finance the schools. It seems that the larger the area represented by the local authority, the easier it becomes to obtain necessary credit" (*Annual Report of the Department of Education, 1934*, p. 35). Representatives of school trustees and teachers meeting at Saskatoon, June 1, 1936, after pointing out that the rural school tax varied from 2 mills in some districts to 22 in others, passed the following resolution: "Whereas the present system of education in Saskatchewan has failed to provide (a) A reasonable measure of equal educational opportunity for the boys and girls of the province. (b) Has forced hundreds of teachers to give their services in this vitally important work at starvation wages. (c) Has resulted in arrears of teachers' salaries to the extent of more than \$1,000,000. (d) Has placed upon many ratepayers an unfair share of the school tax burden and allowed others to escape their full share of this responsibility: Be it resolved that this joint committee, consisting of the official research committee of the Saskatchewan School Trustees' Association, representatives of the Catholic-Trustees' Association, L'Association des Commissionnaires d'Ecole Franco-Canadien, and the official committee of the Saskatchewan Teachers' Federation urge upon the government the necessity of appointing an independent commission to study the educational system of Saskatchewan with a view to correcting the evils mentioned in the preamble" (*Western Producer*, Saskatoon, June 4, 1936). See also other *Annual Reports of the Department of Education, 1925-36*; *Annual Survey of Education in Canada, 1934* (Ottawa, Dominion Bureau of Statistics, 1936), pp. xiii-xvi; *Report of the Committee on School Finance and School Grants, 1933*. Proposals of the Trustees' Association for reform of the system of school grants are given in the latter *Report*. For the views of the teachers on rural school finance and the small administrative unit, see annual reports of officials of the Teachers' Federation. A committee to examine school finance and administration was appointed by the government late in 1938.

districts",²⁶ and under continued joint pressure from the School Trustees' Association and the Teachers' Federation action to correct some of the worst abuses in the system of rural elementary education appears almost inevitable.

The demands for provision of facilities for primary education in the wheat-producing areas had scarcely been met when the problem of making provision for secondary education presented itself. The expense and other disadvantages of sending children to the collegiate institutes and high schools located in the cities and some of the larger towns forced all except a few of the more ambitious to leave school at the end of the primary grades. With the development of villages and small towns, it became possible to maintain schools of two or more rooms in such centres, and to extend instruction to cover at least some of the high-school grades. Continuation schools of this sort increased rapidly after 1917 under the impetus of a special government grant of \$4.50 per teaching day for each class room maintained exclusively for pupils above Grade VII with an average attendance of 15. These schools helped materially in relieving the pressure for secondary education in the rural areas immediately surrounding the local centres, but the limitations imposed by distance alone are obvious.

Another approach to the problem was through the formation of large or consolidated school districts comprising not less than 36 square miles and providing conveyance for all children situated more than one and one-half miles from the school, usually located in a village or small town. The increased secondary-school enrolment makes it possible to maintain one or more high-school rooms with a relatively high standard of efficiency.²⁷ Between 1913 and 1921, 39 consolidated school districts were formed but only 2 have been added since that time. The chief obstacle to extension of the system has been the high cost of conveyance since annual expenditures for this item have frequently exceeded the amount paid in teachers' salaries, and, despite extremely generous government

²⁶*Report of the Commission of Inquiry into Provincial and Municipal Taxation to the Government of the Province of Saskatchewan, 1936*, pp. 87-8. For further discussion of school grants and taxation, see *ibid.*, pp. 74-89, 158-62, and 173-4.

²⁷Consolidated schools have, of course, advantages over the ungraded one-room rural school for the lower grades also, arising out of a division of work among teachers, improved buildings, equipment, libraries, etc. Complaints about the length of time small children must, in some cases, spend in the vans appear to have been rare.

grants toward conveyance, the mill rate in consolidated districts has tended to average some two-thirds higher than in other districts.²⁸ Consolidated schools do good work but the heavy burden involved in supporting them, even in well-settled areas and with careful financial administration, has made even progressive rural communities reluctant to adopt this solution of the high-school problem.

TABLE XXVI
ENROLMENT IN HIGH-SCHOOL GRADES IN SASKATCHEWAN, 1914-34*

Total enrolment		Enrolment in high schools and collegiate institutes		Enrolment in other schools			
				Town and village		Rural	
Year	Grades IX-XII	Number	Per cent	Number	Per cent	Number	Per cent
1914...	5,769	2,926	50.7	2,191	38.0	652	11.3
1924...	16,235	6,947	42.8	6,777	41.7	2,511	15.5
1934...	35,137	10,337	29.4	12,918	36.8	11,882	33.8

**Annual Report of the Department of Education, 1934.*

The failure of continuation and consolidated schools to meet the high-school problem in rural areas has meant that crowding into the higher grades has been disproportionately severe in the small rural schools. In 1930 amendments to the School Act made it obligatory for all boards to provide instruction to the end of Grade X unless granted special exemption by the Minister. The effect of this legislation and of economic depression has been a marked increase in the number of pupils enrolled in Grades IX and X in rural schools, so that while rural schools accounted for only 15.5 per cent of the total enrolment in high-school grades in 1924 and 20.9 per cent in 1930, they claimed 33.6 per cent in 1935. The large increases, both absolute and relative, in the high-school enrolments of the smaller centres and especially in rural schools between 1914 and 1934 are shown in table xxvi. To supplement the high-school work carried on by rural schools, the scope of the Government Correspondence School at Regina was widened in 1930 to include instruction in three of the four high-school grades. For

²⁸See *Report of Committee on School Finance and School Grants, 1933*, pp. 16-18. Until 1932 when all school grants were reduced the government grant toward conveyance was one-third the actual cost thereof.

six months of the year the instructors of the Correspondence School give radio broadcasts for one-half hour each school-day on certain subjects. Instruction papers covering all subjects are supplied to the pupils of rural schools free of charge, the hard-pressed local teacher thus being relieved of the need for organization and preparation of subject-matter, though remaining responsible for all work of correction and supervision.²⁹ Pupils receiving full tuition from the Correspondence School have averaged about 800 a year since 1930 and are charged a fee of \$10 for each of Grades IX and X and of \$15 for Grade XI, but those in the dried-out areas who have been unable to pay these fees have not been refused admission.

The attempt to crowd high-school instruction into the one-room rural school has worked out badly and inspectors are insistent that such a policy shall be discontinued as soon as economic conditions will permit.³⁰ The Committee on School Finance and School Grants, 1933, reviewed the various attempts to work out a satisfactory method of providing secondary education on the prairies and pointed out that distance and finance continue to be the stumbling blocks in the way of a solution:

The high school problem has been, for years, one of the most difficult with which those interested in education have had to contend. Except in the cities, towns and larger villages it still remains unsolved notwithstanding the Government Correspondence School for Grades IX, X and XI, the provisions of section 222 of The School Act which permits of a number of districts combining to maintain a high school, very generous Government grants and municipal legislation enabling a municipality to make grants up to \$1,000.00 per year toward high school education in the municipality. The problem is again chiefly one of distance although there is, at the same time, the financial side. Advocates of the rural high school idea by which there might be intermediate high schools at a few points in each municipality and a senior high school at one central point overlook the difficulty of getting the pupils to school which, of course, is one of the first requirements in any plan of education. . . . There are still many boys and girls of high school age who are unable, by reason of distance or other cause, to attend a high school or a continuation school. The present law which requires that Grades IX and X be provided for if necessary in any school, combined with the facilities of the Government Correspondence School, solves to some

²⁹Nearly all the teachers and pupils in rural schools and a large number of the teachers and pupils in the small continuation schools of the villages and towns make use of some or all of the assistance offered by the Correspondence School.

³⁰For the views expressed by inspectors of rural schools, see *Annual Report of the Department of Education, 1934*, pp. 41-2; *1935*, pp. 45-6.

extent the problem of high school facilities for rural school pupils but such an arrangement can never adequately replace a properly organised high school. Moreover, it introduces further difficulties for it requires a teacher of exceptional ability and standing to satisfactorily assume the responsibility of a one-teacher school with as many as 10 grades enrolled. The rural high school problem cannot be properly solved by placing this work as well as Grades I to VIII in charge of one teacher. It is not one of the functions of this Committee to offer a solution to this high school problem but obviously the development of high schools must depend largely on financial support. . . . The future policy of the Department of Education respecting grants for rural high schools may largely determine what provision will be made for high school education.³¹

The average number of years' schooling received per child in the province increased from 4.96 in 1911 to 6.95 in 1921 and to 8.39 in 1931.³² Three out of every 100 pupils were in the high-school grades in 1921 and 13 out of every 100 in 1931. The census of 1931 showed, however, that 22.4 per cent of rural boys and 31.5 per cent of rural girls of high-school age (15-19) in the province were at school as compared with 55.4 per cent of urban boys and 53 per cent of urban girls, and, if proper allowance could be made for rural-urban migration, the discrepancy would undoubtedly be increased.³³

In the field of higher education, the University of Saskatchewan situated at Saskatoon has been from its establishment in 1907³⁴ an integral part of the provincial system of education. Through the widespread activities of its College of Agriculture the university has maintained a close and continuous association with the life of the agrarian community.³⁵ With practically no endowments and with fees which down to the depression were largely nominal in character, the university has been almost entirely dependent upon government grants for its support. Centralized control has made for both efficient administration of public funds and the

³¹*Report of the Committee on School Finance and School Grants 1933*, pp. 11-13.

³²*The Prairie Provinces in their Relation to the National Economy of Canada: A Statistical Study of their Social and Economic Condition in the Twentieth Century* (Ottawa, 1934), p. 151. The 1931 figure for Saskatchewan compared with 8.82 for Alberta, 8.68 for Manitoba, and 8.55 for the Dominion.

³³See *Annual Survey of Education in Canada, 1934*, pp. xvii-xix.

³⁴See *Statutes of Saskatchewan*, 7 Edw. VII, c. 24. Classes in arts and science and in agriculture were opened in the fall of 1909 in temporary quarters. The first university building was opened in the fall of 1912.

³⁵See below, pp. 115-21. See also *Report of the Saskatchewan Educational Commission on Agricultural and Industrial Education, 1912* (Regina, 1915), pp. 30-3.

maintenance of academic standards. By 1930 capital investments in buildings, equipment, and the university farm were in excess of \$4,000,000; in addition to the Arts course and a Graduate School, professional training was being offered in agriculture, engineering, law, accounting, education, medicine (pre-clinical years only), pharmacy, household science, and music; four theological colleges had been granted affiliation, and the instruction to the end of the second year of the Arts course given by some six junior colleges in different parts of the province, was being recognized.³⁶ Full-time degree students had increased from 70 in 1909 to 660 in 1920 and 1,610 in 1930.³⁷

With the depression provincial grants to the university were reduced by 40 per cent within two years and the total government appropriation was cut from \$807,812 in 1930 to \$397,438 in 1934.³⁸ To meet this shrinkage in revenues the university was forced to increase tuition fees in all colleges,³⁹ to make drastic reductions in staff salaries, and to curtail all research activities. These adjustments have had serious effects upon the efficiency of the university, as the President pointed out in 1935:

The enforced economies of the last few years have entailed serious losses. Because of reduced salaries the University has been unable to retain or attract the best men. Within eighteen months offers have been made to eight men, three have left us and more may go. Classes have been enlarged to enable fewer persons to do the work. Certain classes are too large for effective teaching. . . . Laboratory assistants are now required to supervise twice as many students as formerly. This is one of the reasons for the failures of new students. The lack of funds has stopped or reduced much important research. Only 8 out of 48 projects in Agronomy are now carried

³⁶Regina College, the largest of the junior colleges, became a part of the university in 1934. Financial difficulties resulting from depression forced Outlook College to close in 1936.

³⁷See *Annual Reports of the President of the University of Saskatchewan*. The above figures are exclusive of Summer School registrations which have averaged about 1,000 each summer in recent years and of registration in correspondence courses, first offered in 1929 and averaging over 600 a year since 1935.

³⁸See *Financial Statistics of the Provincial School Systems in Canada, 1914-34: Cost of Education Bulletin no. 5* (Ottawa, 1935), p. 13. The President reported revenues from government grants for current purposes as follows: 1930, \$676,727; 1931, \$652,216; 1932, \$550,064; 1933, \$476,948; 1934, \$398,600; 1935, \$400,154; 1936, \$432,000; 1937, \$462,500; 1938, \$468,667.

³⁹Tuition fees in arts and science, for instance, were increased from \$30 to \$90 a year. Revenues from fees have been as follows: 1930, \$74,780; 1931, \$91,049; 1932, \$91,154; 1933, \$138,702; 1934, \$134,126; 1935, \$140,514; 1936, \$157,449; 1937, \$175,766; 1938, \$167,184.

on. Report after report of research states—"delayed for lack of funds". Some of these investigations are of great economic importance, for example, the Soil Investigations and Farm Surveys for Land Utilization purposes; the Experiments in Animal Diseases and their effect upon the health of men; Cereal Breeding for disease resistant strains and Animal Breeding for better adaptation to western conditions. . . .⁴⁰

Attendance has been well maintained, partly because a decline in the registration of students from rural areas has been more than offset by gains from urban centres as the ordinary avenues of opportunity for employment in trade and industry were closed to those leaving high schools, and partly because the university has followed a generous policy of allowing students time in the payment of their fees.⁴¹ Since information as to the occupation of fathers of students attending university is not available, it is not possible to determine what proportion of the students come from rural areas or how this proportion has been affected by the agricultural depression. Enrolment in the associate course in agriculture, a course especially designed for farm boys wishing to spend the winter months in study at the university, averaged 80 a year from 1925 to 1930, 47 in 1931, 20 in 1932, 6 in 1933, 9 in 1934, 16 in 1935, 39 in 1936, and 41 in 1937. In the degree courses of the different colleges, general observation combined with an analysis of enrolment records for a ten-year period would appear to indicate that although the farm population makes up more than two-thirds of the total population of the province, probably less than one-third of the university students come from the farms and that the proportion has been declining.⁴²

Agricultural Societies

Educational services of a less formal nature than schools and colleges have made important contributions to rural life.

⁴⁰*President's Report for the Year 1934-35* (Saskatoon, University of Saskatchewan, 1935), pp. 7-8; see also *ibid.*, 1935-36, pp. 5-6; 1936-37, pp. 10-15; and 1937-38, pp. 11-12.

⁴¹Over 40 per cent of the students were granted extension of time in payment of fees amounting to approximately \$180,000 in the four years 1933-6. At June 30, 1937, less than \$18,000 of this amount was still outstanding.

⁴²In the five year period 1925-9 the number of students giving their home address as one of the eight cities of the province or as outside the province altogether averaged 53 per cent as against 56 per cent for the five year period 1930-4. After allowances for errors made by students in registration these percentages might be reduced to 50 and 53 respectively. Of the remaining students it is impossible to separate those coming from the smaller towns and villages from those coming from the farms.

Four agricultural societies were organized in the south of the province and one at Prince Albert in the north in 1884. The period of expansion saw a rapid growth in numbers facilitated by provincial government grants (and, from 1912 to 1923 by grants

TABLE XXVII
SUMMARY OF THE MORE IMPORTANT ACTIVITIES OF SASKATCHEWAN
AGRICULTURAL SOCIETIES, 1928-37*

	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
Agricultural exhibitions	146	140	138	73	52	29	23	34	32	30
Plowing matches and demon- strations	48	58	34	38	12	12	19	18	21	..
Field crop competitions	54	48	39	48	11	7	8	17	11	10
Garden competitions	36	36	38	23	8	5	3	12	7	..
Seed fairs	46	46	46	20	40	13	11	10	13	8
Poultry shows	42	39	40	15	11	8	11	8	14	8
Grain clubs	..	..	36	28	26	39	73	157	231	239
Swine clubs	21	19	24	42	30	29	23	27	30	30
Calf clubs	..	..	9	8	8	11	21	24	35	33
Lecture short courses	159	133	210	126	136	167	155	124	141	160
Annual rallies	57	53	57	53	48	62	49	46	33	36
Summer field days	..	..	..	13	37	38	36	40	31	46
Excursions to university	..	1	5	4	16	14	16	18	10	12

*Compiled from *Annual Reports of the Director of Agricultural Extension*, 1928 to 1938.

from the Dominion government for demonstration trains, special lectures, etc.)⁴³ and by 1931 nearly all the agricultural area was included in the territory of the 167 agricultural societies. The provincial university has always maintained a close relationship through the numerous activities of the Extension Department of the College of Agriculture; the work of the agricultural societies is supervised by the Director of Agricultural Extension and the annual convention of the societies is invariably held at the uni-

⁴³See *Statutes of Canada*, 2 Geo. V (1912), c. 3; and 3 Geo. V (1912-13), c. 5. Total expenditures by the Dominion government on agricultural extension work, instruction, demonstration, and research in Saskatchewan from 1912 to 1923 were approximately \$750,000. See also Luella Gettys, *The Administration of Canadian Conditional Grants: A Study in Dominion Provincial Relationships* (Chicago, 1938), chap. ii; and A. S. Morton and Chester Martin, *History of Prairie Settlement and "Dominion Lands" Policy* (Toronto, 1938), pp. 132-4 and 156-61.

versity. The annual exhibitions at which prizes are offered for the best exhibits of grain, livestock, garden produce, small fruits, home cooking, etc., and the annual community rallies⁴⁴ are, as shown in table xxvii, only two of the more important of the varied activities of these community organizations.

TABLE XXVIII
PROVINCIAL GOVERNMENT GRANTS TO SASKATCHEWAN
AGRICULTURAL SOCIETIES, 1928-38*

Year	Total grant†	Regina and Saskatoon exhibitions	Remaining societies
1928.....	\$133,340	\$24,875	\$109,015
1929.....	127,660	26,415	101,745
1930.....	137,267	30,592	107,175
1931.....	129,093	30,255	99,588
1932.....	89,999	29,674	61,075
1933.....	24,761	10,000	14,761
1934.....	20,400	5,000	15,400
1935.....	14,379	5,000	9,379
1936.....	23,575	15,000	8,475
1937.....	24,320	15,000	9,320
1938.....	24,460	15,000	9,460

*From *Public Accounts of the Province of Saskatchewan*, 1928-38.

†Exclusive of an annual grant to the Association of Agricultural Societies averaging \$500 from 1928 to 1933 and \$100 after 1933.

Table xxvii also shows the effects of prolonged drought and depression upon the activities of the societies. Provincial government grants to agricultural societies (excluding the Regina and Saskatoon Exhibitions) were reduced from \$107,175 in 1930 to \$14,761 in 1933 with further reductions in subsequent years (see table xxviii). At the close of 1932 the Director of Agricultural Extension reported:

"An Extension Department representative describes a fairly typical gathering of this sort held by the Stoughton Agricultural Society south of Regina in the late fall of 1932: "The rally took the form of a fowl supper at which over 400 sat down; a most amazing event considering the conditions. The evening meeting in addition to the address from the outside speaker included some very fine musical numbers and a splendid play put on by a local rural school, followed by a dance. This is evidently regarded as the major annual social event" (*Annual Report of the Director of Agricultural Extension on the Work of the Agricultural Societies, 1932-33*, Regina, 1933, p. 13).

Not at any time since agricultural societies were first organized, approximately fifty years ago, has the steady growth of their service received a check at all comparable to that of the two-year period just closed. Their program of activities has been so reduced in numbers that it has taken on the appearance of a battalion returning from an engagement on the Western front. The retreat which the adverse climatic and economic conditions precipitated in 1930 and 1931 became a rout in 1932 when to those same conditions was added the inevitable curtailment of grants. . . . But there are bright spots, too. Of the 166 chartered societies, approximately 70 were inactive in 1932, but the encouraging feature is that, notwithstanding the depression and notwithstanding the disappointment and embarrassment which would necessarily attend any curtailment of grants, many societies did carry on in an endeavor to stand by their communities in this time of distress. Prize schedules were drastically reduced, expenses of all kinds had to be cut to the bone but work, and good work, was done. The number of community rallies and functions of all kinds indicated the widespread effort both on the part of community leaders and of the members in general to keep things going.⁴⁶

The following year saw further restriction of the activities of the societies as the morale of local leaders began to weaken under the continued strain:

For the agricultural societies 1933 was, like its predecessor, a year beset with difficulties. These difficulties were largely financial but combined with this very practical fact was the disinclination to risk anything which involved cost or obligation. In other words the recent years of disappointment and stress have combined not only to deplete treasuries but to stifle optimism and to dishearten leaders. Leaders who in normal times were very active on behalf of community organizations are now too greatly distressed with their own and their neighbors' difficulties to enter with much spirit and enthusiasm into the organization of community agricultural activities. Critics of rural inactivity too often fail to take full cognizance of this very real fact.⁴⁶

After another discouraging year in which only 73 of the 160 societies were active in any way, the Director pointed out that slightly over 50 per cent of the agricultural societies were definitely in the drought area. Of these societies only 5 held agricultural exhibitions in 1934 as against 18 in the north while rallies were 10 and 25 respectively for the two sections.⁴⁷

⁴⁶*Ibid.*, pp. 11-12.

⁴⁶*Ibid.*, 1933-4, p. 11.

⁴⁷*Ibid.*, 1934-5, pp. 13-14. The Director was of the opinion that part of the work normally carried on by the agricultural societies was being sponsored in 1934 by other organizations as a careful analysis for this year revealed that "about three-fifths of the agricultural activity reported can be credited to agri-

The most outstanding feature of the work of the agricultural societies and the Extension Department during the depression period has been the great interest shown in every phase of activity among farm boys and girls. While the paid-up membership of the agricultural societies was falling from 30,000 to less than 5,000, the total membership of the junior clubs increased from 915 in 1930 to 6,378 in 1937 organized in 239 grain clubs growing wheat, oats, barley, or flax; 33 calf clubs; 30 swine clubs; and 8 poultry clubs; and in 1935 the Director of Extension could declare that "the boys' and girls' agricultural club movement has now become the most important single educational activity being carried on in this province on behalf of agriculture".⁴³ Apart from its local programme each club sends a team of two members to the annual provincial competition held at the university, the winners in each group going on to represent the province in the national competition at the Toronto Royal Winter Fair. The vitality of one of the more ambitious junior organizations on the Regina plains is apparent from the report of the secretary of the Edenwold Junior Agricultural Society:

We had a very successful year with our junior agricultural society, perhaps the best since we came into existence. We had 100 members and finished the year with about \$100.00 in the bank. We sent three boys to the stock-judging competition at Moose Jaw, two boys to the grain-judging competition at Saskatoon and four girls to the girls' camp at Windthorst. We had 20 members in our grain club and had an outing for these members at the lake. We staged a play entitled, "The Road to the City", at Edenwold, Balgonie and Southey and had a crowded hall at each place. We put on a masquerade dance in the Edenwold hall which was attended by about two hundred persons, fifty of whom were in costume. We had a junior stock-judging competition at our fair with 20 competitors and 39 contestants in grain judging and weed seed competitions at our seed fair. We are starting a

cultural societies, the other two-fifths to other organizations". The number of agricultural societies was reduced to 157 in 1935 as 1 was disorganized in 1933 and the charters of 6 others in 1934 and 3 more in 1935 were automatically cancelled when the societies had failed to submit annual reports for a period of three years.

⁴³*Ibid.*, p. 12. The Wheat Pool has encouraged the formation of grain clubs by financial grants which amounted to \$2,900 for the year 1935. It is interesting to note that "all the calf clubs are in, or on the border of, the Park Belt. Feed conditions on the plains prohibit cattle feeding to a large extent. Many enquiries, however, from prairie communities indicate that there is a desire to foster the calf club activity . . . when feed conditions permit. . ." (p. 18).

play again for the coming year and are preparing stock-judging teams for the livestock convention.⁴⁹

Farm boys' and farm girls' camps have been organized through the co-operation of the provincial and federal governments in connection with the larger summer fairs.⁵⁰ Beginning in the fall of 1937 a youth training programme, the costs of which were to be shared equally by the Dominion and provincial governments, was inaugurated. Financial assistance was extended to a group of 25 young men from the drought area to attend the regular five month course of the University Farm School and to 100 others to attend a special six weeks' course at the University, while 71 farm short courses of two weeks were offered at local centres throughout the province. Local short courses of from one to eight weeks were also offered for rural young women. In the fall of 1938 both rural youth training programmes were revised and extended to include larger numbers of young men and young women.

To serve the interests of farm women, Homemakers' Clubs were first organized in 1911 by the University of Saskatchewan as a branch of its extension work. As in the case of the Agricultural Societies, the university has appointed a director and provides speakers, demonstrators, judges, and teachers, though the organization is decentralized in character, each club being encouraged to develop its own programme. During the early years most of the emphasis was placed on household economics, but gradually the basis of the movement was widened to include every aspect of community life and to study national and international problems in relation to the welfare of the rural community. The activities of the clubs are directed by a number of provincial standing committees each of which is concerned with some particular field such as education, public health, international relations, legislation affecting women and children, agriculture, home economics, and, finally, arts and letters—"the stimulation of the artistic and cultural life of the community, through encouragement of music, production of amateur plays, formation of reading groups, establishments of libraries, etc." The clubs have promoted such enterprises as

⁴⁹*Ibid.*, p. 13.

⁵⁰*Ibid.*, 1937-8, p. 26. Attendance at the Farm Boys' Camps fell from 903 in 1930 to 215 in 1932 but an increase in federal grants brought the numbers back to 1,091 in 1937. Attendance at Farm Girls' Camps, organized in 1932, increased from 118 in that year to 854 in 1937.

community halls, skating rinks, rest-rooms, playgrounds, and libraries and the beautification of cemeteries and recreation grounds. Since 1933 Junior Homemakers' Clubs for girls between the ages of 15 and 21 have been organized in a number of districts and short courses of from 3 to 10 days conducted in home economics in various centres under the direction of the Director and her assistants. The expansion of Homemakers' Clubs has continued through the depression until in 1937 there were 367 clubs with 7,350 members. The movement is affiliated with the Federated Women's Institute of Canada and the Associated Countrywomen of the World.⁵¹

Libraries

The provision of library facilities is generally viewed as closely related to, if not properly a part of, any modern educational structure.

In 1938 there were public libraries in operation in seven cities and fifteen towns of Saskatchewan and although the provincial government makes a dollar-for-dollar grant up to a maximum grant of \$200 a year toward the purchase of books⁵² the total amount earned by the towns was less than a thousand dollars.⁵³ Thus as the Commission of Enquiry into Libraries in Canada reported a few years earlier, many of the smaller libraries with which the rural population might be expected to come into contact "must be described as ineffective—moribund".⁵⁴ The public libraries of the three largest cities allow library privileges to rural borrowers on special terms but the number of rural borrowers has always been small.⁵⁵ Small libraries established by Mechanics' and Literary

⁵¹Information from Miss Bertha G. Oxner, Director of Women's Work, Extension Department, University of Saskatchewan. Homemakers' Clubs are well distributed over the province though the membership is lightest in the east-central section with its large South, Eastern, and Central European population.

⁵²See *Statutes of Saskatchewan*, 6 Edw. VII (1906), c. 37, s. 34.

⁵³See *Public Accounts of the Province of Saskatchewan, 1938*. This represented a reduction from grants of about \$1,700 a year earned by the 15 towns in the years 1929-30 and 1930-1. Each one of the 7 cities with public libraries usually earns the full \$200 grant.

⁵⁴*Libraries in Canada: A Study of Library Conditions and Needs by the Commission of Enquiry, John Ridington, Mary J. L. Black and George H. Locke* (Toronto and Chicago, 1933), p. 76.

⁵⁵Moose Jaw Public Library requires an annual fee of \$2.00 from rural borrowers (giving library privileges to all family members); Saskatoon makes a

Institutes receiving a dollar-for-dollar grant up to a maximum of \$50 a year from the provincial government toward the purchase of books, periodicals, and newspapers⁵⁶ serve twenty rural communities and were spending a total of about \$1,000 a year on new reading material down to 1930, but this amount has been reduced to less than \$700 in recent years.⁵⁷ Some of the Institutes are conducted under the auspices of Homemakers' Clubs, United Farmer lodges, and Agricultural Societies, and a number of Homemakers' Clubs have their own libraries. However, it is clear that even after proper account has been taken of all these agencies their service in relation to the rural book problem of the province scarcely more than touches its fringe.⁵⁸

The organization of the Government Travelling Library with its 100,000 volumes packed into special library boxes containing from 50 to 60 books each for free circulation in rural areas represents another approach to the problem. Boxes are sent only to the representative of a district or local organization with the understanding that the books are for the use of the entire community and are usually kept at the school or community hall for the convenience of borrowers. While the greater part of each collection is made up of fiction, information is always obtained as to any special reading tastes and the national origin of the majority of the population in a given district so that these facts may be taken into account in choosing the books for shipment. The library boxes are loaned for a period of from nine to twelve months, and after return a new box is sent out upon request. The government pays the outgoing freight charges, although as an economy measure a transportation charge of \$1.00 was made from 1930 to 1934 on outgoing boxes. Borrowers usually accumulate a small fund for return transportation charges by soliciting a small contribution from each borrower or by levying fines on overdue books, though it is stated in the regulations governing these libraries that "in no case should a borrower be made to feel that a fee is necessary in order to borrow books".

charge of \$1.00 per year and will mail books at borrower's expense; Regina requires only a small deposit. The total number of rural borrowers from these libraries was around 250 in 1935. Information by interview and correspondence from the respective Librarians, June-July, 1935.

⁵⁶See *Statutes of Saskatchewan*, 6 Edw. VII (1906), c. 32, s. 1.

⁵⁷See *Public Accounts of the Province of Saskatchewan*, 1928-38.

⁵⁸See *Libraries in Canada*, p. 76.

TABLE XXIX

CIRCULATION AND COST OF GOVERNMENT TRAVELLING AND OPEN SHELF LIBRARIES, 1928-37*

Year	GOVERNMENT TRAVELLING LIBRARIES			OPEN SHELF LIBRARY	
	Libraries in circulation	Number of books	Cost to government	Circulation (books)	Cost to government
1928-9	1,250	60,000	\$25,049	25,237	\$13,163
1929-30	1,283	61,504	22,061	25,525	10,936
1930-1	1,720	82,560	22,885	22,795	12,125
1931-2	1,920	92,160	19,870	7,367	4,748
1932-3	2,004	96,196	9,326	5,564	859
1933-4	2,001	96,546	9,764	5,524	735
1934-5	2,154	100,000	11,080	6,780	1,748
1935-6	2,200	100,000	11,027	7,840	3,146
1936-7	2,200	100,000	10,265	8,325	2,664

*Information from the Commissioner of Libraries, Archives and Publications, and the *Public Accounts of the Province of Saskatchewan*, 1928-37.

It has not been possible to meet out of sharply reduced appropriations all the demands for new libraries which have been a feature of the depression period but table xxix shows the expanding record of the last few years.

During the last five years there has been an increased and insistent demand for new libraries. This is particularly evident in districts where the distress has been accentuated by crop conditions. In some districts it would appear as if the only reading matter available were the books of our libraries and they are in constant circulation far beyond that recorded. Many of the people are apparently unable to afford the cheapest of periodicals and in some houses even newspapers are rarely seen. Under the conditions which prevail reading seems the only relaxation left to these people and to further deprive them of access to books has in many cases imposed a bitter hardship but one that we could not avert with the means at our disposal.⁵⁹

In 1935 it was estimated that the number of readers had risen to 100,000 a year.

When the increased demand for travelling libraries found the government unable to fill all applications, the librarian of the Saskatoon Public Library in the winter of 1933-4 devised a similar rural book distribution scheme to assist in meeting the need. A

⁵⁹Correspondence from the Legislative Librarian, Regina, Sept., 1934.

beginning was made with 5,000 adult books and bound magazines and 5,000 children's books donated by the Toronto Public Library and transported free by the railways to Saskatoon for redistribution. Widespread appeals to public libraries and associations in Eastern Canada quickly brought the total stock up to about 50,000 books. These were packed into boxes containing approximately 60 books, selected so that each box included some fiction, non-fiction, children's books, and a few magazines. All transportation costs are paid by the borrowers, though when boxes are sent to points in the far south of the province or up to the northern fringe exchange of boxes between neighbouring groups of borrowers is permitted in order to save freight charges. Since all books have been donated and no expenses beyond organization, sorting, and packing have been incurred by the central library, greater flexibility in administration is possible than in the case of libraries purchased and maintained by public funds. Publicity given to the scheme through the Saskatoon press and local radio stations resulted in 200 more applications than could be filled in the winter of 1933-4, but since that time it has been possible to meet all requests. The largest number of boxes have been distributed to the south-west of Saskatoon, though at the end of 1938, when nearly 2,000 boxes comprising more than 100,000 volumes had been distributed, about 300 boxes had been spread quite evenly across the breadth of the province in the far south and a corresponding number distributed on the northern pioneer fringe.⁶⁰

Supplementary to the Government Travelling Library is the Government Open Shelf Library at Regina containing approximately 15,000 volumes available to all residents of the province who have not access to the public libraries of the three largest cities. The books cover a wide range of subjects, including a few standard works of fiction, so that the library partially fulfils the function of a reference library to the people of outlying districts, although since 1930 its usefulness has been seriously impaired by financial inability to continue purchases of new books. Selections by borrowers are

⁶⁰See report in Saskatoon *Star-Phoenix*, Dec. 31, 1938. The Regina Public Library sent out boxes of discarded books to rural districts down to 1933 when applications became so numerous that arrangements were made to send all discarded books to the Government Travelling Libraries for distribution. The Moose Jaw Public Library sends out boxes of discarded books to rural areas each year but no system has been established.

made from the printed catalogue and the general policy has been for the government to pay the outgoing and the borrower the return postage. The payment of even return postage would undoubtedly have checked borrowings even if the government had not imposed a further levy of 10 cents for postage on each outgoing book during the period November, 1931, to October, 1934. The result of this policy was an abrupt decline in borrowings from this library (see table xxix).

Since 1929 the Wheat Pool has operated a similar open shelf library for the use of its members. New books have been added and in 1937 the collection consisted of approximately 2,000 volumes on economics, history, geography, philosophy, sociology, science, etc., with a limited selection of fiction. At first the Pool paid postage both ways and borrowings in 1930-1 were 5,272 but when in the autumn of 1931 borrowers were asked to pay all mailing costs only 788 books were sent out in the following year. In 1932 a compromise was effected under which the organization paid postage on outgoing books while the borrowers paid return postage, following which borrowings rose to 2,416 in 1932-3 and were back to the 1930-1 level by 1935.⁶¹

Despite the best efforts of the Government and Saskatoon Travelling Libraries and of the Government and Wheat Pool Open Shelf Libraries, "it is easy", as the Commission of Enquiry into Libraries in Canada reported concerning the Saskatchewan Government Library services in 1933, "to see how little impression they can make on the general book problem".⁶² The limitations of choice alone are obvious and probably less than 25 per cent of the rural population have any contact even with these restricted library services.

⁶¹"These figures probably do not represent the number of people who make use of the Pool library, as we know that a considerable number of books circulate freely in the district before they are returned, although strictly speaking this is not supposed to be done. One of our directors remarked the other day that he believed every book he took out of the Library was read by at least half a dozen people" (Correspondence from the Librarian, Saskatchewan Wheat Pool Library, Regina, June, 1935).

⁶²*Libraries in Canada*, p. 78. A library scheme involving book distribution through the use of motor vans, as in the Fraser Valley Library Demonstration project, would encounter special difficulties on the prairies owing to the sparseness of rural population and the fact that weather conditions usually do not permit of automobile travel in the winter months when the demand for books is heaviest.

2. TELEPHONES

It was not until the foundations of an educational system had been established that the agricultural community turned its attention to the provision of other services,⁶³ some of which, on account of large wheat farms, a sparse population, and the absence of financial reserves, required heavy investments of borrowed capital. Roads presented no urgent problem to the pioneer on the open, hard-packed prairie grasslands. As the settler's plough cut across the winding prairie trails, forcing a more geometric conformation, rural municipalities could, with slight expenditures from current revenues and by utilization of local labour, make road allowances roughly passable for horse vehicles and the hauling of grain, leaving further improvements to be made gradually and piecemeal as occasion demanded or opportunity permitted. A telephone system, on the other hand, involved immediate construction to a high standard and, unless built by private enterprise or the provincial government, the consequent assumption of a heavy burden of fixed charges by the rural community.

Private enterprise failed to meet satisfactorily any of the demands made upon it for telephone services, and the provincial government, though undertaking to build the urban systems and the long distance lines, had come to the conclusion that construction of a telephone system to serve the scattered wheat growers of the prairies would impose too great a strain on the finances of the new province.⁶⁴ The Rural Telephone Act of 1908⁶⁵ facilitated the creation of essentially mutual or co-operative rural telephone

⁶³"When school district increases fell off markedly from 1913 to 1918, rural telephone companies were being organized and carried to new high peaks. The significant fact to be observed here is that educational services were the first to be established in the pioneer communities of the province, and that others were added only after what was regarded as the most essential requirement had been met" (Mackintosh *et al.*, *Economic Problems of the Prairie Provinces*, p. 153).

⁶⁴See G. E. Britnell, "Public Ownership of Telephones in the Prairie Provinces" (Master's Thesis, University of Toronto, 1934), chaps. i, iii, and v. Provincial governments built and operated the rural telephone systems in Manitoba, with its relatively small and compact agricultural area, and in Alberta where agricultural development was less rapid than in Saskatchewan and where urban development and the presence of other industries such as coal mining placed less emphasis on wheat. See also James Mavor, *Government Telephones: The Experience of Manitoba, Canada* (New York, 1916).

⁶⁵*Statutes of Saskatchewan*, 8 Edw. VII, c. 7.

companies whose members were to subscribe the necessary capital for construction, the provincial government granting a limited assistance by way of free poles and exercising supervision over the finances, construction, and operation of the rural systems. One of the most common drawbacks to the municipal ownership of telephones had been overcome in that the territorial limits of any rural company might correspond with the most desirable exchange area, and by 1913, 337 rural companies had been organized with a total capitalization of \$1,021,485 and 7,554 miles of rural pole line had been constructed, giving telephone service to 8,024 farmers.⁶⁶

It was clear, however, that rural telephone development was not keeping pace with agricultural expansion, and the pioneer community, finding it difficult to finance the building of lines out of current revenue, sought an extension of the powers of rural telephone companies to permit of borrowing for purposes of capital construction. Accordingly a new Act in 1913⁶⁷ allowed companies to issue and sell debentures to a maximum of \$350 per pole mile running for a period not exceeding 15 years and with interest at not more than 8 per cent. Funds for repayment were to be raised by taxing at a flat rate per acre, all lands lying within 100 yards of any pole line of the system—an admirable method of forcing the absentee landholder to pay his share of the burden.⁶⁸

After a brief initial period in which borrowing was restricted by prevailing economic conditions and the hesitation of financial houses to accept the new type of debenture, the organization of rural telephone companies, the sale of debentures, and the construction of lines proceeded with extraordinary rapidity. Between 1914 and 1921, 900 new companies floated debentures in excess of \$14,000,000 to finance construction of nearly 50,000 miles of new pole line and add 54,000 farm telephones to the rural system. Little construction remained to be done in the prairie region, and the favourable ratio of new stations to new pole line indicated that most of the construction between 1924 and 1930 went to give

⁶⁶*Annual Report of the Department of Telephones of the Province of Saskatchewan, 1913*, pp. 51-5. In the meantime the government had pursued a policy of vigorous expansion in the urban and long distance fields, absorbing and extending the few small privately owned town systems, building new urban systems, and providing upwards of 3,000 miles of trunk lines.

⁶⁷*Statutes of Saskatchewan*, 3 Geo. V (1912-13), c. 33.

⁶⁸But see *Report of the Commission of Inquiry into Provincial and Municipal Taxation to the Government of the Province of Saskatchewan, 1936*, p. 90.

connections to farmers situated along existing lines who had not accepted services when the lines were first built.⁶⁹

The cost of the rural system, with subscribers averaging little better than one per mile of pole line, had been high. A great many of the lines had been built at peak prices with money borrowed at an 8 per cent interest rate in the immediate post-war years.⁷⁰ The construction of lines with borrowed capital made it easy for rural communities to assume charges which proved extremely difficult to support, and marginal districts sometimes found themselves taxed to meet debenture payments on telephone systems which they could no longer afford to operate. Telephone tax levies for the repayment of debentures averaged close to \$2,000,000 a year all through the twenties and accounted for 10 per cent of the total tax levies of rural municipalities.⁷¹ Yet by 1930 nearly two-thirds of the total debenture debt had been repaid with interest, the financial position of most companies appeared to be sound, and defaults had been insignificant.

The beginning of the depression coincided with the beginning of a period of debenture maturities, thus making possible a fairly rapid reduction in telephone levies. The total coupons payable (including both principal and interest) declined from \$1,824,829 in 1930 to \$1,059,669 in 1934 and to \$203,134 in 1938, while by the beginning of the latter year nearly one-half of all companies originally issuing debentures had been able to discontinue, and most of the remainder substantially to reduce, tax levies. Despite this timely relief and debenture payments aggregating more than \$5,600,000 in the seven years 1930 to 1936 inclusive, it was reported that "failure of municipalities to collect taxes has forced practically all the telephone companies into default with respect to some

⁶⁹See *Annual Reports of the Department of Telephones, 1914-30*. For a discussion of the economic and social contributions made by the rural telephone to farm life on the prairies, see below, chap. vii. Rural telephone development north of the wheat belt was much less rapid and extensive.

⁷⁰See *Annual Reports of the Local Government Board of the Province of Saskatchewan, 1919-24*. The total debenture issues of rural telephone companies down to the end of 1930 amounted to \$17,499,000. Capital expenditures by the government system, which had provided (for an annual fee) the exchange equipment used by most rural companies, and which had built 6,750 miles of long distance pole line together with the urban exchanges, had been in excess of \$15,000,000.

⁷¹See *Annual Reports of the Department of Municipal Affairs, 1920-30* (Regina).

part of principal and interest due on their debentures".⁷² Outstanding debenture principal as at January 1, 1938, amounted to \$3,107,598 of which \$2,373,890 had become due and was in default.

Maturing debentures indicate that most of the large outdoor plant of rural telephone companies in the prairie region has been in use for 15 to 20 years. With heavy losses of subscribers⁷³ and no funds available for maintenance or reconstruction, deterioration has been marked and at the end of 1936, 68 companies had been forced to discontinue operation. Continued depression must mean the rapid disintegration of a large part of the prairie network as most of the pole line will have to be rebuilt shortly if it is to remain in service. In 1937 the engineers of the Department of Telephones were of the opinion that it would require the expenditure of at least \$6,000,000 to re-build the rural plant to a proper working standard.⁷⁴

3. HIGHWAYS AND MARKET ROADS

The disappearance of most of the prairie trails as more and more land was brought under cultivation, followed by the steady expansion in the use of the automobile and the introduction of the grain truck, brought increasing pressure on the provincial government and rural municipal councils to build provincial highways and to improve market roads. (The provincial government had assumed full responsibility for a provincial highway system, for all ferries⁷⁵

⁷²*Report of the Commission of Inquiry into Provincial and Municipal Taxation to the Government of the Province of Saskatchewan, 1936*, p. 89. Other information from *Annual Reports of the Department of Telephones*, and from the Hon. W. J. Patterson, Premier and Minister of Telephones. At the end of 1937 defaults of principal and interest amounted to \$2,940,045; outstanding debenture principal not due had been reduced to \$726,030; and rural municipalities owed telephone companies an unstated amount. Cancellation of tax arrears has necessitated adjustment of debenture indebtedness and re-imposition of tax levies for payment of adjusted debt.

⁷³See below, pp. 178-80.

⁷⁴Total expenditures for the seven years 1931-7 inclusive by 1,153 rural telephone companies for renewals and reconstruction amounted to \$299,007, made up of debenture issues, \$39,555; special tax levies, \$258,452.

⁷⁵Forty-five ferries are operated by the government free of charge (excepting a small fee for night service), of which number 20 are on the South Saskatchewan River, 18 on the North, 1 on the Saskatchewan, 1 on the Red Deer south of Hudson Bay Junction, and 5 on the Beaver River on the north-west pioneer fringe. Bridges have been built over the smaller rivers in the south-eastern part of the province.

and for all bridges over 16 feet in length, undertaking in addition to assist in the construction of main market roads by extending road grants to the rural municipalities when funds were available.)

Down to 1921 the work of the Department of Highways had been largely confined to assistance in the provision of the elementary road services required by a pioneer economy, but between 1921 and the end of 1927 the beginnings of a modern highway system appeared in the construction of nearly 3,000 miles of well-built earth road, less than 100 miles of which was gravel surfaced. This rate of progress failed to satisfy the urban centres in particular, much emphasis being laid on the supposed gains which would come from the tourist traffic with better highways and on the superior roads to be found in other provinces and states. As a result an expensive programme of new construction and gravel surfacing, financed largely by government borrowings and covering the years from 1928 to 1931 inclusive, added 2,000 miles of gravel surfaced roads while new construction doubled the graded earth mileage of the provincial highways system.⁷⁶

Meanwhile rural municipalities had been spending increasing amounts on the improvement of market and other local roads. Capital expenditures chargeable to revenue and consisting largely of expenditures on road construction trebled between 1922 and 1928, amounting to \$2,750,000 each year in 1928 and 1929.⁷⁷ Maintenance expenditures also showed an upward trend rising to nearly \$2,500,000 annually for these years. Despite large aggregate expenditures the great mileage of municipal roads meant that, at best, only medium standard earth roads could be built and while many of these were excellent in dry weather when properly maintained, they frequently became impassable after rain.

In 1930 and 1931 road work bulked large as a relief measure in the dried-out areas,⁷⁸ the provincial Highways Department and

⁷⁶See *Annual Reports of the Department of Highways of the Province of Saskatchewan, 1927-28 to 1931-32*. Total construction expenditures on the provincial highway system for the 7 years 1921-7 inclusive were \$7,437,233, of which sum \$1,806,255 was reimbursed by the Dominion government under the provisions of the Canada Highways Act, *Statutes of Canada*, 1919, 9-10 Geo. V, c. 54. Subsequent expenditures by the provincial government were: 1928, \$2,478,083; 1929, \$4,143,943; 1930, \$7,500,238; and 1931, \$4,388,868. An undetermined part of the 1930 and 1931 outlays might be considered as relief expenditures.

⁷⁷See *Annual Reports of the Department of Municipal Affairs, 1928-29 and 1929-30*.

⁷⁸See above, chap. v, sec. 4.

the rural municipalities co-operating in a number of schemes. In the fall of 1929 the Department had allocated certain moneys to be expended in giving employment to farmers who had suffered a partial or complete crop failure, and when in the early summer of 1930 it became apparent that owing to continued drought conditions a larger area would require relief, additional road grants were made to rural municipalities, followed in the autumn by the establishment of 42 large relief road camps for work on provincial highways in the south. Approximately 9,000 farmers and 25,000 teams were given work in these relief camps at the rate, after deductions for board and horse feed had been made, of \$5.00 a day for a man and four horses, no man being permitted to earn more than \$100.⁷⁹ By 1931 the rural relief situation had become much worse and, finding it difficult to employ many of those requiring relief on provincial highway construction, the Department agreed to expenditures of relief road moneys on local municipal roads so that farmers employed might return to their homes at night. The rate of pay was reduced and no wages were paid in cash, but orders for necessities such as "staple groceries, medicine, binder-twine, machinery repairs, clothing, fuel, kerosene, harness repairs, and feed for the horses actually used on the work", might be placed with local retail merchants, who were charged to fill them at current prices.⁸⁰ Total expenditures by the provincial government on relief road work in the dried-out areas were: 1929, \$348,479; 1930, \$1,131,096; 1931, \$1,277,313; the Dominion government contributing \$500,000 in 1930 and \$792,221 in 1931.⁸¹

Nevertheless, at the end of this period of active road building by the provincial government and the rural municipalities, less than 3 per cent of the farms in the wheat belt were situated on gravelled roads, 67 per cent were on improved dirt roads, and a full 30 per cent on those classified by the census as unimproved dirt roads. Even in the census division which included the highly developed Regina plains, only 5 per cent of the farms were on gravelled roads, 78 per cent were on improved, and 17 per cent unimproved, dirt roads.⁸²

⁷⁹See *Annual Report of the Department of Highways, 1930-31*, pp. 13-14.

⁸⁰*Ibid.*, 1931-32, pp. 10-11.

⁸¹See *ibid.*, 1929-30, 1930-1, and 1931-2.

⁸²See *Seventh Census of Canada, 1931: Census of Agriculture, Saskatchewan* (Ottawa, 1934), pp. 44-5. For the entire province only 80 out of 132,932 farms reporting were situated on asphalt, concrete, or macadam roads; 3,552 or 2.7 per

TABLE XXX

EXPENDITURES OF THE GOVERNMENT OF SASKATCHEWAN ON PROVINCIAL HIGHWAYS AND MARKET ROADS, 1928-37*
(in thousands of dollars)

	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
PUBLIC IMPROVEMENTS CHARGEABLE TO REVENUE :										
Provincial highway construction...	\$79	\$835	\$297			\$5	\$7	\$82	\$8	\$10
Provincial highway gravelling....		683	648							
Provincial highway maintenance..	279	289	367	\$934	\$556	450	529	461	552	675
Market road improvement†.....	438	589	1,067	833	8	59	37	8	10	23
Small bridges, maintenance.....	96	109	130	112	114	24	27	30	33	72
Ferry accommodation.....	145	145	153	154	119	75	80	91	79	89
General expenses†.....	169	215	296	285	185	96	110	140	131	61
	1,206	2,865	2,958	2,317	982	709	791	812	813	931
PUBLIC IMPROVEMENTS CHARGEABLE TO CAPITAL :										
Provincial highway construction..	1,063	1,006	3,197	2,940	2,216	5			104	98
Provincial highway gravelling....		18		3,591	506				151	22
Steel and concrete bridges.....	108	240	365	613	155				109	15
Colonization roads§.....				135	110	1			372	57
General expenses 	66	88	105	208	104	50	16	9	13	25
	1,237	1,353	3,668	7,487	3,090	55	16	9	749	217

PUBLIC IMPROVEMENTS CHARGEABLE TO RELIEF : **									
Provincial highway construction...				492	1,720	101	20	430	491
Provincial highway gravelling . . .					50			225	200
Provincial highway hard-surfacing					1,927			108	499
Market roads					196	4		62	118
Colonization roads††.....									
ADMINISTRATION : ††.	36	37	37	492	3,893	105	20	825	1,307
TOTAL EXPENDITURES.	\$2,479	\$4,254	\$6,663	\$10,476	\$8,150	\$1,033	\$987	\$1,803	\$2,546

*Compiled from statements of annual expenditures furnished by the Deputy Minister of Highways, Regina, July, 1936-Sept., 1937.

†Includes relief expenditures of \$311,814 in 1929-30 and \$138,640 in 1930-1.

‡Includes inspections, surveys, drainage, salaries, supplies, maintenance of equipment, etc.

§Includes expenditure on market roads of \$358,131 in 1935-6 and \$54,584 in 1936-7.

||Includes inspections, salaries, and lands for right-of-way and gravel pits.

**Excludes credits of approximately \$1,200,000 in 1933-4, \$600,000 in 1934-5, \$153,000 in 1935-6, and \$294,203 in 1936-7, allowed for road work done by relief recipients.

††Includes expenditure in 1936-7 of \$60,251 as aid to transportation into mining areas; \$38,497 for rock dam near Prince Albert; and \$18,772 for bridge construction.

‡‡Includes administration of Vehicles, Gasoline, and Public Utilities Acts after 1930.

As drought and depression descended upon the prairies and the relief problem assumed tremendous proportions, the construction of new highways and the improvement of municipal roads were abruptly halted. Not a mile of new grade or of new gravelling was reported in 1932 or 1933 but in 1934 a special loan of \$750,000 from the federal government permitted a modest programme which added about 100 miles of new earth grade and 200 miles of gravel surfacing to the provincial highways system. In each of the years 1935-8 inclusive, only relatively small extensions, usually as part of relief projects, were made. At the beginning of 1938, the province had a highway system made up of 141 miles of bituminous treated gravel, 2,805 miles of gravel surfacing, and 3,446 miles of standard earth. In the rural municipalities no road work was done in 1932 but in 1933, under an arrangement between the government and the rural municipalities, farmers discharged obligations to the Saskatchewan Relief Commission for direct relief amounting to \$1,200,000 by road work in the municipalities. This policy appears to have been discontinued in 1934 in the prairie region, perhaps as a result of the friction and uncertainty caused through cancellation of remaining indebtedness for early relief advances.⁸³ In 1934 and subsequent years small expenditures were made on market roads under relief agreements between the provincial government and rural municipalities in the drought area (table xxx).

Economic conditions have made it necessary to reduce outlays on existing gravelled highways and on government and municipal earth roads far below the minimum required for satisfactory maintenance.

As part of the rigid curtailment in expenditure, maintenance of roads and bridges dropped from \$1,840,804 in the fiscal year 1931 to \$668,238 in the fiscal year 1936. This maintenance expenditure has been insufficient to maintain the capital values originally invested in the roads. The Department of Highways calculates that a present expenditure of \$3,270,000 on "deferred maintenance" is required to recondition and reconstruct highways to their original condition. In addition, an annual expenditure of \$2,106,250

cent on gravel; 85,665 or 64.4 on improved dirt; and 32.8 per cent on unimproved dirt roads. Saskatchewan had a larger percentage of farms in the latter group than any other province with the exception of Alberta and a much smaller percentage in the gravelled roads group.

⁸³For a discussion of relief projects aiming at the provision of colonization roads in the unorganized districts of the northern pioneer fringe in these years, see below, chap. viii, sec. 1.

is required to maintain the capital value of roads and bridges. Motor vehicle traffic will continue to grow in weight, volume and speed, and it is poor economy to permit the provincial investment in roads and bridges to waste through inadequate maintenance.⁸⁴

In 1936 the Chief Engineer of the Department of Highways reported that "many miles of our provincial highway system have deteriorated to such an extent that if work is not proceeded with, it will only be a matter of a short time until the capital investment in such highways will be entirely lost".⁸⁵ In rural municipalities maintenance expenditures have been drastically cut in efforts to reduce tax levies but, in addition, through the drought areas, security given for municipal bank loans has frequently prevented municipalities from allowing taxpayers to work out any part of their tax indebtedness by road work, while the Bridge Branch of the Department of Highways has reported each year additional cases where it has been "found necessary to ask the municipality to close to traffic, bridges which had become dangerous and for which sufficient funds for reconstruction were not available".⁸⁶

⁸⁴*Report of the Commission of Inquiry into Provincial and Municipal Taxation to the Government of the Province of Saskatchewan, 1936*, p. 57. See also *A Submission by the Government of Saskatchewan*, pp. 253-8. On similar conditions obtaining in Alberta, see Courtland Elliott and J. A. Walker, *Report to Alberta Bondholders' Committee: A Survey of the Fiscal Problems of the Province of Alberta in relation to the Economic and Social Conditions affecting them* (Edmonton, 1936, mimeo.), p. 113.

⁸⁵*Annual Report of the Department of Highways and Transportation, 1935-6*, p. 29. The previous year the same official had stated: "The total mileage of gravel surfaced highways at the end of 1934 was 2,252.1 miles. Of this 1,914 miles were completed by the end of 1930. As very little resurfacing has been done on any of the highways we have 1,914 miles of gravelled highways which have been giving service for four years or more. The gravel surface on many of the more heavily travelled sections has been worn so thin that after periods of heavy rain it is very difficult to maintain these as all weather roads. . . . I wish to again emphasise the necessity of undertaking extensive gravel replacement work. The maintenance costs given above simply represent the cost of surface repairs, weed cutting, sign erection, etc., and we are faced with deferred maintenance charges in the form of gravel replacement on a substantial mileage of our gravel surfaced roads" (*ibid.*, 1934-5, pp. 8-10).

⁸⁶*Ibid.*, p. 12. See also 1932-3, p. 22, and 1933-4, p. 20; and *Annual Reports of the Department of Municipal Affairs, 1931-2 to 1936-8*. The Department of Highways is responsible for nearly 3,200 bridges of which approximately 300 are of steel and 150 of concrete construction.

4. MEDICAL AND HEALTH SERVICES

In the period of active prairie settlement, medical and health services were poor and inadequate, but with economic development doctors from Eastern Canada, the United States, and other countries were attracted to the better wheat-growing districts, hospitals were built in all the larger urban centres, and the Bureau, later the Department, of Public Health of the provincial government greatly widened the scope of its activities. Group action in rural communities was facilitated by legislation in 1916 permitting any municipality to make grants to induce a doctor and/or a nurse, to reside and practise within the municipality, and by a measure which provided that two or more adjoining rural municipalities might establish and operate a union municipal hospital.⁸⁷ A number of municipalities adopted the practice of paying grants to doctors up to the statutory maximum of \$1,500 a year and in 1919 rural municipalities were given power to engage a full-time municipal doctor at a salary not exceeding \$5,000 a year.⁸⁸ Few full-time appointments were made until the late twenties when the Deputy Minister of Health reported that it was "becoming more and more difficult to retain medical men in the smaller rural centres".⁸⁹

Although after 1916 a large part of the rural population continued to rely on the cities for hospitalization,⁹⁰ communities distant from existing hospital facilities built and operated 22 municipal

⁸⁷*Statutes of Saskatchewan*, 6 Geo. V, c. 21 and c. 12.

⁸⁸*Ibid.*, 9 Geo. V, c. 37.

⁸⁹*Report of the Third Conference on the Medical Services in Canada, 1929* (Ottawa, 1930), p. 28. In discussing full-time municipal doctors, the Saskatchewan health official stated that salaries were from \$3,000 to \$5,000 per annum with considerable variation in agreements, though he considered a fairly typical agreement would be: "That the doctor act as medical health officer; that free medical attention be given all resident ratepayers and their families, also to those indigents who are not ratepayers; that no charge be made for maternity cases; that vaccination against smallpox and immunization against diphtheria be carried on among school and pre-school children; that prenatal consultations be given; and that school children be medically examined once a year. In some instances the doctor is allowed to charge one or two dollars for the initial visit" (p. 29).

⁹⁰See *Annual Reports of the Bureau of Public Health of the Province of Saskatchewan*, 1917-22, and *Annual Reports of the Department of Public Health*, 1923-36. In 1935, 7 municipal and 5 Catholic hospitals in the 8 cities accounted for 1,900 of 3,400 beds in government-aided hospitals (exclusive of sanatoria and mental hospitals). The 82 government-aided hospitals were made up as follows:

union hospitals. (Construction was usually financed, as in the case of schools and telephones, by debenture issues.) Union hospitals received the government maintenance grant of 50 cents per patient per day, payable to all hospitals in the province complying with Department regulations, but each union hospital district made its own arrangement as to what proportion of the balance necessary for maintenance and operation should be raised by taxation and what proportion should come from hospital charges. "In some cases the whole hospital fee is paid by the municipality; in others, the patient pays a very nominal hospital charge, possibly one dollar per day, and taxation takes care of the balance of the cost. In some the number of days' treatment for each ratepayer during a year, at the expense of the municipality, is limited. In others only the hospital fees for maternity cases are paid by the municipality. . . . In all cases . . . even though free hospitalization is not provided, all deficits are made up by the co-operating municipalities."⁹¹ Union and other small country hospitals, perhaps more than the large urban institutions, have benefited from the free vaccine and analytical and inspection services given by the Laboratory and Sanitation Divisions of the Department of Public Health while at

Auspice	No. of hospitals	No. of beds	Percentage of beds
Municipal (urban).....	11	1,292	31.3
Sisters.....	14	1,111	26.9
Sanatoria.....	3	713	17.3
Union.....	22	517	12.5
Community.....	13	184	4.5
United Church.....	4	113	2.7
Private.....	5	93	2.3
V.O.N.....	1	13	0.3
Red Cross.....	9	91	2.2
	82	4,127	100.0

The number of hospital beds per 1,000 of population in Saskatchewan compared favourably with the other provinces: British Columbia, 8.8; Alberta, 6.8; Saskatchewan, 6.4; Manitoba, 6.3; Ontario, 5.6; Quebec, 5.5; Nova Scotia, 4.9; New Brunswick, 4.7; and Prince Edward Island, 3.8; with the Dominion average 6.0 (see *Annual Report of Hospitals in Canada, 1935*, Ottawa, 1937, p. viii).

⁹¹*Report of the Third Conference on the Medical Services in Canada, 1929* (speech by Dr. F. C. Middleton, Deputy Minister of Health for Saskatchewan), p. 30. In 1934, 20 of the municipalities supporting Union Hospitals provided free hospitalization for their residents, the cost being paid on an assessed taxation basis.

the same time they have been able to render valuable assistance to the Department in its vigorous and highly successful fight against communicable diseases.

The provincial government, in addition to the financial support extended to hospitals⁹² and the work of the Department of Public Health, also co-operated with the rural and urban municipalities in making adequate provision for the diagnosis and treatment of tuberculosis. The three large tuberculosis sanatoria were built and equipped by the province⁹³ and then turned over to be operated by the Anti-Tuberculosis League, the directorate of which is made up of representatives of the provincial government, the rural and urban municipalities, and the Saskatchewan Medical Association. Sanatorium treatment is free to any tubercular patient who has resided in the province for six months prior to making application for admission. The provincial government pays a grant of \$1.00 per patient per day (approximately one-third of the cost) while the rural municipalities pay 60 per cent and the urban 40 per cent of the balance of all maintenance and operating expenses.⁹⁴ Subscriptions from private sources derived from the sale of Christmas seals have been used to provide a fund to be used in the support of travelling clinics for the examination of suspected cases. The effectiveness of the long and intensive campaign may be seen in the sharp drop in the number of deaths per 100,000 of population from 45.1 in 1930 to 27.8 in 1935, leading the Minister of Public Health to declare that "as a result of what has been accomplished in the last fifteen years, the vital statistics show Saskatchewan with the lowest tuberculosis mortality not only of Canadian provinces, but of any country in the world".⁹⁵

⁹²Government grants to hospitals in 1930 amounted to \$634,396 (including \$281,380 to the tuberculosis sanatoria). In the same year mental hospitals at Battleford and Weyburn built and maintained by the province and a psychopathic ward in the Regina General Hospital cost the province an additional \$780,418 in operating expenses.

⁹³The first and largest at Fort Qu'Appelle in 1917; the second, at Saskatoon, in 1925; and the third, at Prince Albert, in 1930.

⁹⁴See *Revised Statutes of Saskatchewan*, 1930, c. 263. The League has found it increasingly difficult to finance its operations since 1930 as municipalities owed it \$650,000 at the end of 1937 on past due assessments.

⁹⁵The Hon. J. M. Uhrich, *Public Health and State Medicine: A Speech delivered in the Legislative Assembly of Saskatchewan, January, 1935* (Regina, 1935), p. 12. In 1937 the death-rate per 100,000 from tuberculosis for the

To supplement local health services in rural areas, especially with respect to child welfare and the control of communicable diseases, the Department of Public Health instituted a plan of public health nursing in 1928.⁹⁶ As a beginning 15 districts of approximately 6 municipalities each were formed, with the understanding that new districts would be added until the entire province had been covered. The public health nurse in charge of each district was to work in co-operation with rural teachers, spending the morning in school health work and the afternoon in pre-natal, infant welfare and any other work which might be found to require attention in the community. In a further attempt to improve health facilities in rural areas, the Department in 1929 organized the first full-time Health Unit with headquarters at Gravelbourg in the centre of one of the most important wheat-growing districts in the province. The Health Unit included 8 rural municipalities, one town, and 15 villages with a total population of 22,000 of which over 80 per cent was rural. The full-time services of a medical health officer, a sanitary officer, a public health nurse, and a secretary-technician were furnished at a cost of about \$14,000 per annum, half the expense being borne by the province and half by the local authorities.⁹⁷

Thus by 1930 substantial progress had been made and promising experiments were under way. Many communicable diseases had been practically stamped out, maternal and infant mortality had been greatly reduced, tuberculosis appeared to be under control, a Permanent Cancer Commission had been established,⁹⁸ and some of the more prosperous rural communities had worked out satisfactory methods of supporting a local doctor and of providing hospitalization. Nevertheless, in a large number of districts, lack-

various provinces was: Quebec, 88.3; New Brunswick, 87.1; Nova Scotia, 84.4; British Columbia, 79.8; Prince Edward Island, 69.9; Manitoba, 59.4; Alberta, 43.5; Ontario, 35.5; Saskatchewan, 31.5; with a Dominion average of 59.9 (*Vital Statistics of Canada, 1937, Preliminary Report*, Ottawa, 1938, p. 15).

⁹⁶See *Annual Report of the Department of Public Health, 1928*, pp. 46-7, and 1929, pp. 45-9.

⁹⁷*Ibid.*, 1929, pp. 54-5.

⁹⁸See *Statutes of Saskatchewan*, 20 Geo. V, c. 64. Consultative diagnostic and treatment clinics attached to the municipal hospitals were opened in Regina (Dec., 1931) and Saskatoon (Jan., 1932). Treatment is not free but none has been refused for lack of funds. Government expenditures on cancer services for the six years ending April 30, 1937, totalled approximately \$176,000.

ing attraction for the private practitioner, frequently remote from any large urban centre, and without the necessary economic base for proper though expensive municipal action, the provision of adequate medical and health facilities remained an unsolved problem.

After 1930 maintenance of elementary medical services over the greater part of the prairie region became one of the problems of relief administration. In November, 1931, the government arranged through the Saskatchewan Relief Commission to give assistance to doctors and dentists in the relief areas and to all hospitals caring for patients from any of these areas. Maximum grants of \$75 a month for the purpose of reducing overhead expenses such as transportation costs, rent, emergency medicines, etc., were payable to doctors in the "A" area and of \$40 a month in the "B" and "C" areas; corresponding grants for dentists were \$25 and \$15, while hospitals received (in addition to the regular government grant of 50 cents per patient per day) special grants of 50 cents per patient per day for patients from the "A" area and 25 cents for patients from the "B" and "C" areas. During the winter of 1931-2, 80 of the 100 doctors in the 93 municipal units of the "A" area, 52 of the 161 doctors in the 158 municipal units of the "B" and "C" areas, and a total of 31 dentists found it necessary to secure assistance.⁹⁹ With a fair crop over most of the south in 1932, the medical relief area was reduced to some 56 municipalities including a similar number of doctors, but drought in 1933 and again in 1934, followed by rust and drought in 1935 with continued drought in 1936, forced the relief authorities to enlarge the medical relief area to include 176 rural municipalities or practically the whole of the wheat belt in each of these years.¹⁰⁰

⁹⁹See *Annual Report of the Department of Public Health, 1931*, p. 9. For a description of "A", "B", and "C" areas, and total costs of medical relief in these years, see above, chap. v, sec. 4.

¹⁰⁰See *Annual Report of the Department of Health, 1934*, p. 7; *1935*, p. 9; *1936*, pp. 10-1. "Besides these areas, provision was made to cover the situation brought about by the many new settlers having moved from the southern drought area to the northern part of the province." Grants to physicians were "in the northern areas with many relief settlers, \$25 at the start, but later \$50 per month. . . . Any approved hospital was also entitled to a grant of 20c per patient per day with respect to hospitalization of those persons who, since 1931, had moved from the drought area to the northern part of the province" (*ibid.*, *1934*, p. 7).

With the increased severity of the drought in 1936 and 1937, it was found that existing grants to doctors (\$100 a month as from September 1, 1936, in the "A" area) were insufficient to permit them to carry on and that a general exodus was beginning. The average cash earnings of 130 doctors in the drought area over a period of two years were reported by the Minister of Health as \$27 a month. Beginning September 1, 1937, the provincial government agreed to supplement the cash earnings of such doctors up to a maximum of \$150 a month with an allowance for transportation. Provision was also made for grants up to a maximum of \$100 a month (calculated at 25 per cent of the regular schedule of the College of Physicians and Surgeons) to doctors in the larger centres doing authorized work for relief patients, and special grants for hospitalization of drought area patients were increased to 75 cents per patient per day.¹⁰¹

The difficulties experienced by a great many communities in retaining the services of a doctor under such conditions have placed increasing emphasis on the municipal doctor plan. The country doctor in private practice felt the full force of the depression not so much in a lessening of work as in a growing accumulation of bad debts so that, as a doctor from the centre of the wheat belt declared at the end of 1933, "many have used up all their savings and relinquished their insurance".¹⁰² A municipal contract sometimes, though not always, gave a little more security. Accordingly, between 1929 and 1936 the number of full-time municipal doctors increased from 17 to 68 though, as the Minister of Public Health has admitted, "many of the poor fellows are not getting anything at the present time";¹⁰³ a number of other municipalities have passed the necessary by-law to engage a doctor but owing, no doubt, to financial difficulties have not made appointments, while it is reported that "107 rural municipalities give other grants to physicians".¹⁰⁴

¹⁰¹See particularly evidence of the Hon. J. M. Uhrich, Minister of Health, *Report of Proceedings of the Royal Commission on Dominion-Provincial Relations, 1937* (Dec. 15), pp. 1959-63.

¹⁰²Letter by a country doctor to the writer.

¹⁰³The Hon. J. M. Uhrich, *Public Health and State Medicine*, p. 26.

¹⁰⁴Information from the Deputy Minister of Public Health, Regina. For an account of municipal doctor schemes in operation, population served, etc., at the end of 1937, see evidence of the Hon. J. M. Uhrich, *Report of Proceedings of the Royal Commission on Dominion-Provincial Relations*, pp. 1998-2000.

Meanwhile, though the need has been increased, the Department of Public Health has found it impossible to extend, or even fully to maintain, its rural programme. In 1932 it was reported that "the Gravelbourg full-time Health Unit No. 1, which had been organized for a three year term, came to a close on March 12, 1932, as the various co-operating municipalities were in the heart of the drought area and so could not see their way to continue".¹⁰⁵ In the same year the Public Health Nursing Division reported that "because of financial conditions in the province it became necessary to ask each member of the staff to take a leave of absence of from three to four months" so that "the amount of work accomplished was necessarily decreased".¹⁰⁶ Only 495 out of more than 5,000 schools could be visited and 15,000 pupils inspected in 1932 as compared with 1,053 schools and 34,500 pupils in 1931; inspections covered 22,400 pupils in 637 schools in 1933, 19,800 pupils in 543 schools in 1934, and about 18,000 pupils in approximately 500 schools in each of the years 1935 and 1936. Much of the work done since 1930 has been of a relief character. Thus, beginning in 1933 dental clinics were organized by the public health nurses with the financial support of the dental associations and the co-operation of dentists, with the result that an increasing number of children in school districts of the relief areas and remote from dentists have been benefited.¹⁰⁷

The regular government grant of 50 cents per patient per day to Union and other general hospitals has been maintained throughout the depression. In 1935 an amendment to the Union Hospital Act was passed making provision for temporary closing as "due to the present economic conditions some of the smaller hospitals in the drought areas had considered the advisability of temporarily closing on account of the difficulty in financing",¹⁰⁸ but no hospital actually found it necessary to close during the year. Though hospital facilities have been maintained, the ability of the rural population especially to take advantage of them and of the specialized medical services usually associated with them has undoubtedly

¹⁰⁵*Annual Report of the Department of Public Health, 1932*, p. 7. Two of the co-operating municipalities did, however, engage municipal doctors "as they desired to feature the treatment of disease along with the prevention".

¹⁰⁶*Ibid.*, p. 36.

¹⁰⁷*Ibid.*, 1934, pp. 38-43; 1935, p. 39; 1936, p. 46.

¹⁰⁸*Ibid.*, 1934, p. 7. See also *Statutes of Saskatchewan*, 25 Geo. V, c. 82.

declined,¹⁰⁹ while at the same time there has been a progressive deterioration of health for large numbers owing to delayed diagnosis, treatment, and operations, and the neglect of bad teeth and defective sight.

The failure to work out any really satisfactory basis for the provision of medical and health facilities for a large part of the rural population, even in normal times, followed by the hardship and suffering of the depression period has brought demands and proposals from farmers' organizations, municipal associations, and medical men for a complete system of state medicine. The annual cost of giving the farming community "free medical and surgical treatment, free hospital treatment, free drugs and maternity benefits in kind" has been estimated at \$8,300,000, of which, the Minister of Public Health in the Saskatchewan government has suggested, two-ninths might be paid by the province and seven-ninths by the farmer in the form of a tax on land similar to the rural telephone levy. On this basis in 1935 the Minister estimated the average annual charge per farmer would be approximately \$45.52 or \$16.52 per quarter section, though when allowance is made for waste and inferior land and for differences in size of farm units, the average wheat grower's contribution would probably be heavier. In the meantime, however, the Department of Public Health and other public bodies are gathering additional material and studying the difficult problems of organization and finance.¹¹⁰

It appears that, assuming no scheme of national health insurance is introduced under Dominion auspices, with any substantial measure of economic recovery the provision of a complete system of state medicine for the wheat economy will be attempted by the province.

¹⁰⁹Mental hospitals are in a different class and no charge is made for most cases. A third mental hospital is badly needed as the rapid increase in patients in the Battleford and Weyburn institutions since 1930 has rendered the problem of over-crowding particularly acute. Built to accommodate a total of 2,200 patients, they had 3,800 patients at the end of 1937. See *A Submission by the Government of Saskatchewan*, pp. 280-1, and evidence of the Hon. J. M. Uhrich, *Report of Proceedings of the Royal Commission on Dominion-Provincial Relations*, pp. 1953-5 and 1985.

¹¹⁰See the Brief supporting national health insurance submitted by the Hon. J. M. Uhrich, Minister of Health, to the Royal Commission on Dominion-Provincial Relations, 1937 (*Report of Proceedings of the Royal Commission on Dominion-Provincial Relations*, pp. 1964-2000). See also *A Submission by the Government of Saskatchewan*, pp. 280-3; and the Hon. J. M. Uhrich, *Public Health and State Medicine*, pp. 18-28.

5. SOCIAL WELFARE SERVICES

In an economy whose members had become accustomed to think in terms of group action and co-operative enterprise, the collective provision of a number of social welfare services, some closely related to the medical and health services, others designed to assist individuals handicapped by age, special circumstance, or physical affliction, appeared both appropriate and essential.

In 1919 the provincial government instituted a system of maternity grants to assist needy mothers in districts remote from medical assistance. The maximum grant was \$25 of which the mother usually received \$10 in cash, the balance being paid out for medical and nursing services. In the ten years ending April 30, 1929, 3,579 mothers were assisted at a total cost of \$81,122, payments of approximately \$11,000 a year being made to about 500 mothers for each of the five years previous to 1929. Distress occasioned by crop failures and low prices was immediately reflected in increased applications for maternity benefits; 1,122 mothers were assisted at a cost of \$25,258 in 1929-30 while the number rose to 3,020 and the expenditure to \$64,116 in 1930-1. After another four months in which 1,842 mothers received assistance at a cost of \$45,000, the government, pleading the necessity for economy, suspended payment of maternity grants at the beginning of September, 1931.¹¹¹ In December of the same year the Department of Public Health began to distribute maternity packages which could be supplied at a cost of less than \$3.00 each and in the next three years nearly 11,000 were sent out at a cost of approximately \$10,000 a year. Following a change of government, the policy of distributing maternity packages was discontinued on October 15, 1934, and maternity grants to a maximum of \$25 in each case restored, expenditures rising to \$18,712 in 1934-5; \$43,803 in 1935-6; and \$59,299 in 1936-7.¹¹²

Mothers' allowances, payable monthly by the provincial government and applying at first only to widows but gradually extended to provide support or partial support for the dependent children under 16 years of age, of any woman unable to take proper care of her child or children, and who is a widow or the wife of an inmate

¹¹¹"At this same rate for the whole year it [the maternity grant] would have cost at least \$120,000" (*Annual Report of the Department of Public Health, 1931*, p. 40).

¹¹²*Ibid.*, 1936, p. 12.

of a tuberculosis sanatorium, mental hospital, or penal institution, or of a man who is unable to support his family on account of permanent incapacitation, were introduced at the same time as maternity grants.¹¹³ The total amount paid in mothers' allowances down to April 30, 1929, was approximately \$2,500,000 with expenditures averaging around \$350,000 annually for four or five years before 1929.¹¹⁴ Table xxxi giving the approximate number of

TABLE XXXI

MOTHERS' ALLOWANCES IN SASKATCHEWAN, 1928-38*

Year	Number of families	Number of children under 16	Average paid per recipient per month	Average paid per child per month	Total annual expenditure
1928-9.....	1,400	4,400	\$24.00	\$7.63	\$397,775
1929-30....	1,650	5,100	23.52	7.63	467,575
1930-1.....	2,050	6,000	22.35	7.58	544,250
1931-2.....	2,350	6,500	17.25	6.15	483,618
1932-3.....	2,400	6,600	14.05	5.18	403,915
1933-4.....	2,550	6,700	13.42	5.10	407,993
1934-5.....	2,750	7,100	13.41	5.16	440,580
1935-6.....	2,920	7,650	13.47	5.16	474,120
1936-7.....	2,950	7,740	13.63	5.21	484,068
1937-8.....	3,000	7,840	13.79	5.28	495,988

*Compiled from *Annual Reports of the Bureau of Child Protection, 1934-5* and subsequent years.

families and children receiving aid, together with the average monthly payments and the total expenditures made since May 1, 1928, shows the steady increase in the numbers receiving benefits and the sharp reductions in the amounts paid to the recipients after 1930. A large part of the increase in the number of families drawing this form of relief, is, as the Superintendent has repeatedly pointed out, "no doubt caused by the prevailing conditions in the province, more particularly to poor crops and unemployment, and

¹¹³*Statutes of Saskatchewan*, 8 Geo. V (1918), c. 68. See also *Revised Statutes of Saskatchewan*, 1930, c. 231, s. 101; 21 Geo. V (1931), c. 74; and 1 Geo. VI (1937), c. 82. Provision has also been made for payment of benefits for the support of a child or children to the foster mother or guardian when the mother is dead. "We do not pay any allowance for the mother, but a fixed allowance for children" (*Annual Report of the Bureau of Child Protection of the Province of Saskatchewan for the Fiscal Year 1935-36*, p. 13).

¹¹⁴See *Journals of the Sixth Session of the Seventh Legislative Assembly of Saskatchewan, 1934*, vol. XXXII, p. 186; and *Canada Year Book, 1935*, pp. 935-6.

partly through a great number of people having used up their reserve resources".¹¹⁶

Dependent, neglected, and handicapped children who cannot be properly looked after under the system of mothers' allowances are taken care of through the Bureau of Child Protection established in 1909¹¹⁶ and the Department of Education. Most of the children in the care of the Bureau are placed in private homes and ultimately adopted while others are placed in the children's shelters of urban centres, boarding homes, mental hospitals, and correctional institutions such as the government Industrial School for Boys at Regina.¹¹⁷ In addition four orphanages maintained by the Catholic and Protestant Churches received grants from the Bureau of Child Protection of approximately \$4,200 a year for some years previous to 1931 but all grants were discontinued at the close of that year.¹¹⁸ A partial restoration of these grants, amounting to \$3,300, was effected in 1936-7. A small number of blind children are escorted by the Bureau to the Ontario School for the Blind at Brantford or to Montreal, while the Department of Education makes a special grant of \$12.50 a month to blind persons in attendance at secondary schools in the province.¹¹⁹ Since 1920 the high-school education

¹¹⁶*Annual Report of the Bureau of Child Protection, 1934-35*, p. 11. See also *ibid.*, 1932-3, p. 10; *ibid.*, 1933-4, p. 12; and *ibid.*, 1935-6, p. 14. In 1937 an amendment to the Child Welfare Act made allowances paid for support of a child a legal charge against any land of which the father or mother may be owner.

¹¹⁸*Statutes of Saskatchewan*, 8 Edw. VII, c. 31. Annual expenditures under the Child Welfare Act increased from less than \$5,000 in the fiscal year 1910 to \$113,676 in 1931; were reduced to \$57,774 in 1935; and amounted to \$76,483 in 1936 and \$82,206 in 1937.

¹¹⁷See *Annual Reports of the Bureau of Child Protection*. The total number of children under the care of the Bureau in 1937 was 773 while Children's Aid Societies in the five largest cities took care of a further 273. The number of boys sent to the Industrial School has been increasing in recent years. The total enrolment was 55 in 1937, more than two-thirds of the boys being from urban centres.

¹¹⁹Information from the Commissioner, Bureau of Child Protection, Regina. The number of children in the 4 institutions averages around 200 a year. In computing grants the Bureau allocated \$2,000 to the largest one, the Roman Catholic Orphanage at Prince Albert, the others being paid proportionately on the basis of residence days; thus the Orange Orphanage at Indian Head received about \$1,300 a year and the Greek Catholic institutions at Yorkton and Ituna about \$900 between them.

¹¹⁹Information from Department of Education, Regina. Total annual expenditures on education of the blind have averaged around \$6,000 in recent years.

of soldiers' dependent children has also been provided for by the Department of Education though the maximum grant payable was reduced from \$240 to \$200 in 1931 followed by a further reduction to \$150 in 1932 and regulations calculated to reduce the number of applications for assistance.¹²⁰ A fully equipped boarding school for the deaf was opened by the Department of Education at Saskatoon in September, 1931, and as no charge is made for tuition, board, or lodging, and since attendance of all deaf children between the ages of 6 and 18 in good physical and mental health is compulsory, the annual enrolment of from 130 to 140 represents practically all of the eligible deaf children in the province.¹²¹

Care of the aged poor had been left largely to the rural and urban municipalities down to May 1, 1928, when the province, taking advantage of the legislation passed by the Dominion Parliament in 1927, introduced non-contributory old age pensions.¹²² Under the federal statute the province was to be responsible for payments and administration, being reimbursed by the Dominion

¹²⁰Expenditures were reduced from \$62,782 in 1931-2 to \$38,190 in 1932-3 but rose again to \$67,171 in 1936-7. Between May 1, 1921, and June 30, 1937, assistance was extended to 1,841 students at a total cost of \$630,260.

¹²¹See *Annual Reports of the Department of Education*, 1931-7 inclusive. Annual expenditures on education of the deaf, exclusive of school construction costs, average around \$25,000 per annum.

¹²²See *Statutes of Canada*, 17 Geo. V, c. 35, and *Statutes of Saskatchewan*, 18 Geo. V, c. 75. Pensions are payable (under s. 8 of the Dominion Act) to every person who:

- "(a) is a British subject, or, being a widow, was such before her marriage;
- (b) has attained the age of seventy years;
- (c) has resided in Canada for . . . twenty years. . . ;
- (d) has resided in the province in which the application for pension is made for . . . five years. . . ;
- (e) is not an Indian as defined by the Indian Act;
- (f) is not in receipt of an income of as much as three hundred and sixty-five dollars (\$365) a year and
- (g) has not made any voluntary assignment or transfer of property for the purpose of qualifying for a pension."

The Act further provides that the pension authority may recover out of the estate of any deceased pensioner the amount of pension payments with interest at 5 per cent, subject to the limitation that no claims shall be made for such recovery out of any part of the estate which passes by will or intestacy to any other pensioner or to any other person who has contributed, since the grant of the pension or for the last three years during which the pension has been paid, to the pensioner's support. (The province has maintained a Home for the Infirm since 1905 requiring an average annual net expenditure of approximately \$20,000 since 1920.)

to the extent of 50 per cent of the actual amount paid to pensioners. Beginning November 1, 1931, the Dominion contribution was increased to 75 per cent of provincial disbursements.¹²³ The maximum pension payable had been set at \$240 yearly subject to reduction by the amount of the income of a pensioner in excess of \$125 a year, but in February, 1932, the government, alarmed by the rapid increase in applicants, increased the discretionary powers of the pension administration in cancelling or reducing pensions (see table XXXII). In the same year a careful check of the financial position of each pensioner resulted in some adjustments while, in addition, the joint maximum pension of all married couples living together was reduced from \$40 to \$30 a month.¹²⁴

TABLE XXXII

OLD AGE PENSIONS PAID IN SASKATCHEWAN, 1928-38*

Year	Number of pensioners	Cost to province†	Total cost
1928-9.....	3,343	\$293,981	\$ 461,951
1929-30.....	4,537	532,559	971,461
1930-1.....	6,227	901,289	1,302,727
1931-2.....	7,588	557,199	1,679,494
1932-3.....	8,253	499,399	1,767,420
1933-4.....	9,280	531,513	1,798,467
1934-5.....	10,167	574,918	1,974,612
1935-6.....	10,746	643,248	2,146,275
1936-7.....	11,440	683,516	2,317,870
1937-8.....	11,761	734,859	2,399,435

*Compiled from *Public Accounts of the Province of Saskatchewan*, 1929-38, and *Annual Reports of the Old Age Pensions Branch*, 1929-38.

†Includes cost of administration.

The importance of old age pensions as a form of rural relief in the dried-out areas was recognized by the Commissioner in 1934 when, after drawing attention to the steady increase in pensioners, he declared that "this of course is due to the continued drought in the southern part of the province. Many people are to-day making application for the Old Age Pension who a few years ago would not have accepted such help although they were then quali-

¹²³See *Statutes of Canada*, 21-22 Geo. V, c. 42.

¹²⁴See *Annual Report of the Old Age Pensions Branch, Province of Saskatchewan, for the Fiscal Year 1932-33*, p. 18.

fied for assistance insofar as age and residence were concerned. These people . . . must receive assistance from an outside source either in the way of relief or pension and, as is to be expected, they have chosen the pension rather than relief."¹²⁵ Many applicants for pensions were owners of farm lands but the disappearance of all property and income values created new problems for the pension authorities, though the Commissioner was confident that pension payments made in such cases would be ultimately recovered:

The Old Age Pension Act and regulations state that 5% of the assessed value of real estate less any encumbrance shall be considered as a net income, or the market value may be taken by the pension authority as a more equitable value. The greatest difficulty under present conditions is to arrive at a fair market value of land in the dried out area. At the present time there is no market for land while at the same time it must be recognized that the land has a value and with even one good crop year it would again be in demand at a fair price. We have therefore, when recommending the pension in these cases, registered a caveat against the title of the property in order that later a refund of the amount paid will be received by the government.

Surveying the still rising tide at the beginning of 1936 the Commissioner was of the opinion that added to drought and low prices and "the fact that those of reasonably mature years when they reached this country in the heavy immigration years have now reached the age of seventy . . . the visitation of rust that overtook the 1935 crop also had the effect of increasing the number of applications".¹²⁶ It is significant as an indication of the pressure to which the wheat economy has been subjected that in Saskatchewan 55 per cent of the population over 70 years of age should find it necessary to depend on old age pensions for support.¹²⁷

¹²⁵*Ibid.*, 1933-34, p. 21.

¹²⁶*Ibid.*, 1934-35, p. 21. See also 1935-36, p. 21, and 1936-37, p. 21.

¹²⁷See *Labour Gazette*, vol. XXXVIII, Nov. 1938, pp. 1127-8. At Sept. 30, 1938, the percentage of pensioners to total population over 70 years of age in each of the provinces operating under the Old Age Pensions Act was: Prince Edward Island, 32.06; New Brunswick, 60.83; Nova Scotia, 51.64; Quebec, 49.50; Ontario, 35.73; Manitoba, 53.68; Saskatchewan, 54.88; Alberta, 54.91; British Columbia, 44.38. An amendment to the Old Age Pensions Act (see *Statutes of Canada*, 1 Geo. VI, c. 13) provided for pensions to the blind 40 years of age and over. The amendment became effective in Saskatchewan, Nov. 15, 1937, and 151 persons were drawing an average monthly pension of \$19.89 at Sept. 30, 1938.

CHAPTER VII

STANDARDS OF LIVING¹

The ability of Saskatchewan to maintain its present population at any acceptable standard of living, and to provide it with decent educational and medical facilities and a minimum economic security, rests entirely on its ability to grow wheat and sell it in the markets of the world.—THE BANK OF CANADA.

(The dominant position of wheat in the economy of Saskatchewan as an export staple determines the standard of living of the great majority of Saskatchewan farmers. Since the cash costs make up a large part of the average farmer's minimum living expenses, "his standard of living (except under severe pressure) is relatively fixed, and the cost of living of the farm family is essentially a business

¹"Standard of living" is here used to include those goods meeting material and physical needs, namely food, clothing, housing, and fuel, together with goods and services contributing to the maintenance of health, education, recreation, and the social relationships of the family. As in similar studies in the United States, standards of expenditure have been accepted as the most satisfactory available measures of actual standards of living. See E. L. Kirkpatrick, *The Farmer's Standard of Living* (New York, 1929), pp. 1-30, and *The Farmer's Standard of Living: A Socio-Economic Study of 2,886 White Farm Families of Selected Localities in 11 States* (Washington, U.S. Department of Agriculture Bulletin, no. 1466, 1926), pp. 1-4; Carle C. Zimmerman, *Consumption and Standards of Living* (New York, 1936), and *Incomes and Expenditures of Minnesota Farm and City Families, 1927-28* (St. Paul, University of Minnesota Bulletin, no. 255, 1929); R. C. Freeman, *Living Expenditures of a Group of Illinois Farm Families, 1930, 1931, 1932* (Urbana, 1934); *A Study of Land Utilization, Farm Production, and Rural Living: Antigonish County, Nova Scotia* (Halifax, 1936); J. A. Field, *Essays on Population and Other Papers* (Chicago, 1931), pp. 387-99. See also J. B. Orr, *Food, Health and Income: Report on a Survey of Adequacy of Diet in Relation to Income* (London, 1936). "The 'cost of production' concept is essentially a fighting concept designed to defend the interest of those by whom it is employed. 'Standard of living' is a similar concept often associated with it. Both are employed effectively by vocal groups and by governments as a means of checking the effects of competition or of providing relief. The spread of the 'cost of production' concept from manufacturing to agriculture has been hastened by the work of accountants and the political influence of agricultural groups and hence tends to accentuate the rigidity of the price structure and the effects of cyclical movements. Cyclical movements involve the alternative expansion and contraction of the money economy with its emphasis on specialization and exchange. With contraction certain areas relapse into a relatively self-sufficient economy, such as existed before expansion. Such areas of enforced self-sufficiency are much wider than is generally appreciated.

{cost, a part of the farm overhead".²) But since 1929 the standard of living obtaining under conditions of relative prosperity has been replaced by a much more flexible depression standard, and under the pressure of low prices and short crops this has been repeatedly driven down below what had previously been considered an irreducible minimum, so that the whole concept of a "minimum" not in terms of "health and decency" but below which the farmer will not continue to produce, may appear of doubtful validity.³ In addition to the more rigid cash operating expenses,⁴ municipal taxes (to keep primary schools open) and debt charges (especially under the crop-share provisions of mortgages and agreements for sale of land and even after allowance has been made for debt postponement legislation)⁵ have impinged upon standards of living and have, when coupled with sharply restricted credit facilities, tended to make living expenses *residual* rather than *primary* charges.

Regardless of time or place, of conditions of general prosperity or general depression, the concept of a standard of living has probably less validity when applied generally to farmers than for any other economic group in modern society. This is particularly true in the Prairie Provinces where variations in soil, climatic conditions, crop hazards, economic development, and productive efficiency between different districts and even within a given district

A retreat to increasing self-sufficiency, generally regarded as a lowering of the 'standard of living', involves a retreat beyond the price system in which a 'cost of production' can be determined. Moreover, commodities vary materially in the rate of increase or decrease of prices during various phases of the business cycle, and an attempt to crystalize price relationships at one stage of the cycle to apply to other stages involves dislocation throughout the structure. The vicious application of the 'cost of production' principle has spread from the United States to meet problems of an internal character. The fluid milk producers are attempting at the present time (1936) to estimate the 'cost of production' in Ontario to support demands for higher prices" (H. A. Innis *et al.*, *The Dairy Industry in Canada*, Toronto, 1937, pp. 259-60, note).

²W. A. Mackintosh *et al.*, *Economic Problems of the Prairie Provinces* (Toronto, 1935), p. 21.

³See V. W. Bladen, "The Theory of Cost in an Economy Based on the Production of Staples: Canada and Wheat" (*The Canadian Economy and its Problems*, ed. H. A. Innis and A. F. W. Plumptre, Toronto, 1934, pp. 135-42).

⁴See above, chap. v, sec. 2.

⁵Furthermore since the wheat farmer receives the bulk of his revenue in the fall of the year he is likely, under the pressure of his creditors, to pay out more than he can really afford, with the result that his standard of living may be seriously impaired for a large part of the following year.

are so pronounced. At the same time, through emphasis on different values, particular racial groups have standards of living vastly different, though not necessarily "higher" or "lower", than other racial groups.⁶

Furthermore, from the opening of the century down to 1929 there can have been few parts of the civilized world in which such tremendous advances from rude, pioneer levels were made possible by the application of constantly improving techniques to the rapid exploitation of virgin resources, as in the Prairie Provinces. The advance over such a wide area could be neither uniform nor continuous, and, although by 1929 it might be said that the wheat economy was in the process of transition from the pioneer stage, of settlement to that of an established community, the problem of presenting an exact picture of the standard of living would be complicated by the fact that the process of transition was in varying degrees of fulfilment throughout the different parts of the region. For these reasons, in the absence of any definite statistical information before 1930 and of an accurate descriptive literature, it has appeared advisable to begin by setting out the factual material collected in later years to serve as a basis for discussion of living standards both previous to and during the depression.

1. FARM LIVING EXPENDITURES IN REPRESENTATIVE AREAS

The intensive surveys carried out by the Farm Management Department of the University of Saskatchewan have provided a mass of concrete data concerning the economic and social conditions prevailing in communities which were selected because they were believed to be representative of the different types and conditions of agricultural development.

When the Farm Management Department of the University of Saskatchewan was established in 1925, plans were made to assemble information

⁶"Different nationalities seem to be so unlike in their ways of life as to cause them to arrive at a given level of satisfaction with different amounts of money income" (N. J. Ware and H. A. Logan, *Labour in Canadian-American Relations*, Toronto, 1937, p. 150). For a discussion of standards of living and trends in modes of living in Doukhobor, Mennonite, and German Catholic communities on the prairies, see C. A. Dawson, *Group Settlement: Ethnic Communities in Western Canada* (Toronto, 1936), pp. 56-67, 130-6, and 312-7, respectively. On the standard of living of Ukrainian communities, see C. H. Young, *The Ukrainian Canadians: A Study in Assimilation* (Toronto, 1931), pp. 100-4 and 287-8; and Robert England, *The Central European Immigrant in Canada* (Toronto, 1929), pp. 69-104.

of economic importance relating to farm businesses in areas representative of the principal types of farming in this province. Research under this programme has included studies of twelve districts for each of which a cross-section of the prevailing farming conditions has been obtained. In all these investigations there has been close co-operation with the Soils Department of the University. The first four studies dealt primarily with land utilization, cost of production of wheat, and the general farm economic problems of the areas. In the second series, the studies of the first surveys were continued, but the scope was extended to include regional settlement, and the progress made by the farmers, and in these surveys the detailed examination of farmers' indebtedness was initiated. The most recent projects, those commencing in 1932, have been particularly designed to study the problems of farm debt, although the subjects of the earlier studies have been continued.⁷

The collection of information on standards of living was in all cases incidental to the primary purposes of these studies so that the material on living costs is neither complete nor carefully analysed. Moreover, in some districts many of the small farms were left out⁸ though "attempts were made in all areas to include groups of farms thoroughly representative of the farming district".⁹ In every survey the average size of the farms included has been

⁷William Allen, E. C. Hope, and F. C. Hitchcock, *Studies of Probable Net Farm Revenues for the Principal Soil Types of Saskatchewan on the basis of their Past Production* (Saskatoon, University of Saskatchewan, College of Agriculture, Bulletin no. 64, 1935), p. 4. The published studies are: *The Farm Business in Saskatchewan: Survey of the Belbeck District, 1926* (Bulletin no. 37, 1927); *Survey of the Melfort District, 1926* (Bulletin no. 43, 1928); *Survey of the Alameda District, 1927* (Bulletin no. 46, 1930); *Survey of the Swift Current-Gull Lake District, 1928* (Bulletin no. 52, 1931); *Studies of Farm Indebtedness and Financial Progress of Saskatchewan Farmers: Report no. 1: Survey Made in the Rural Municipalities of Rosemount, no. 378, and Reford, no. 379, in 1932* (Bulletin no. 60, 1934); *Report no. 2: Surveys Made in the Rural Municipalities of Brokenshell, no. 68, Wellington, no. 97, and Scott, no. 98, in 1932* (Bulletin no. 65, 1935); *Report no. 3: Surveys Made at Indian Head and Balcarres, Grenfell and Wolseley, and Neudorf and Lemberg, in 1933* (Bulletin no. 68, 1935); *Report no. 4: Survey Made in the Humboldt District in 1934* (Bulletin no. 71, 1936). Reports on the Surveys conducted at Kindersley, Turtleford, Davidson, Richmond, and Maple Creek in 1930 and 1931 appear in R. W. Murchie et al., *Agricultural Progress on the Prairie Frontier* (Toronto, 1936), pp. 213-78.

⁸"Although many of the small farms were omitted from the study, reports were obtained from 85 per cent of all the farms exceeding 320 acres" (*Report no. 1*, p. 5).

⁹William Allen, *Research in Farm Finance: A Preliminary Report of Field Studies conducted in the Summer of 1933 for the Saskatchewan Agricultural Research Foundation* (Saskatoon, University of Saskatchewan, College of Agriculture, 1934), p. 3.

TABLE XXXIII
SUMMARY OF ECONOMIC FACTORS CONCERNING STUDIES MADE IN 14 DISTRICTS (2,032 FARMS) OF SASKATCHEWAN:
SURVEYS OF 1930-4*

District	Year of survey	No. of farms in survey	Total area per farm (acres)	Crop land per farm (acres)	Type of land	Wheat yield (bushels per acre) †	Average farm receipts	Average supplementary income	Average new credit	Average cash operating costs ‡
Kindersley	1930	218	557	452	Good prairie	13.3	\$3,126			\$1,451
Turtleford	1930	182	427	202	Fair to good park . . .	12.8	1,915			1,067
Davidson	1931	135	741	652	Fair to good prairie . .	3.8	1,230			1,395
Richmond	1931	79	663	465	Fair prairie	14.1	2,099			1,297
Maple Creek	1931	54	847	436	Inferior prairie	11.1	1,682			1,124
Rosemount and Reford	1932	243	525	394	Fair to good prairie . .	15.2	1,730	\$289	\$343	943
Scott	1932	114	641	572	Best prairie	0.7	320	343	1,293	1,088
Wellington	1932	78	569	435	Fair to good prairie . .	0.1	198	112	822	754
Brokenshell	1932	56	568	344	Poor prairie	0.1	271	186	571	559
Balcarres-Indian Head	1933	122	569	470	Good park	13.1	1,163	317	320	747
Grenfell-Walseley	1933	203	506	344	Fair to good park . . .	10.6	813	226	274	593
Neudorf-Lemberg	1933	89	471	268	Fair park	16.4	757	152	212	482
Humboldt "A" §	1934	312	485	271	Fair to good park . . .	16.0	1,269	262	174	679
Humboldt "B"	1934	147	438	221	Fair to good park . . .	11.0	747	114	153	454

*The Belbeke, Melfort, Alameda, and Swift Current studies have been omitted because data on farm living expenditures were incomplete.

†For year preceding survey.

‡Excludes cash living expenditures (for which see table xxxiv).

§Humboldt "A" comprised farms on loam soils; Humboldt "B", farms on sandy loam soils.

considerably greater than the census average so that the standard of living as reflected in farm living expenditures may be slightly higher than the "real average" for the particular community studied, since the smaller farms cannot, as a rule, yield the net income necessary to provide the same standard of living as that afforded by the larger farm units.¹⁰

A simple classification of the type of land found in each district has been adopted, the size of the average farm and the area of crop land¹¹ indicated, and the wheat yield for the year immediately preceding each survey has been included (table xxxiii). The effects of depressed prices and short crops are apparent in the average incomes for the different communities. In the Davidson, Scott, Wellington, and Brokenshell districts total farm receipts failed to equal cash operating costs even when the cash living costs of the farm family were excluded, so supplementary income and new credit have been given wherever the figures were available. Supplementary income includes bank balance decreases, gifts and legacies, and other miscellaneous cash income while new credits extended to farmers consisted for the most part of relief advances by governments, life insurance and other borrowings, farm implements and repairs, groceries, medical services, and taxes.¹² The cash living expenditures for the farm families included in these surveys are given in table xxxiv. As in 10 of the 14 surveys farm receipts were insufficient to cover total cash operating costs when cash living costs were included, it must be assumed that in many cases a large part of the living costs were financed through extensions of new credit.

Since the general level of prices fell sharply between 1930 and 1934, the actual cash costs of living are not comparable in the different surveys and it has been necessary to attempt some adjustment for changing price levels so that all expenditures might be reduced to a common denominator in terms of the 1929-30 price

¹⁰See Allen *et al.*, *Studies of Probable Net Farm Revenues*, *passim*.

¹¹"The total acreage of the farm is not a good measure of size under Saskatchewan conditions. It will generally be found that the acreage of cultivated land is much more satisfactory within any single soil zone. Even within the same general zone there are differences in the proportions of the cultivated areas which are summerfallowed each year" (Allen *et al.*, *Studies of Probable Net Farm Revenues*, p. 37).

¹²See William Allen, *Research in Farm Finance*, pp. 6-7; also *Report no. 1*, p. 47; *Report no. 2*, p. 52; *Report no. 3*, p. 50; *Report no. 4*, p. 43.

TABLE XXXIV

AVERAGE CASH LIVING EXPENDITURES FOR 2,032 FARM FAMILIES IN 14 DISTRICTS OF SASKATCHEWAN: SURVEYS OF 1930-4*

District	Average resident members of farm family	Food	Clothing	Fuel and light	Health	Domestic help	New fur- nishings	Life insurance	Misc.†	Total
Kindersley.....	4.5	\$365	\$157	\$90	\$46	\$23	\$61	\$83	\$225	\$1,050
Turtleford.....	4.2	406	164	22	53	11	48	90	173	917
Davidson.....	4.6	283	110	101	64	31	7	125	159	880
Richmond.....	5.5	275	137	79	65	14	12	48	177	807
Maple Creek.....	4.0	286	114	53	46	10	15	55	177	756
Rosemount and Reford.	4.5	227	113	69	37	12	6	55	103	622
Scott.....	5.2	177	77	90	46	8	1	76	100	575
Wellington.....	4.7	143	60	61	29	1	0	28	43	365
Brokenshell.....	4.3	154	59	52	16	6	2	46	65	400
Ba carres-Indian Head	4.6	166	64	46	60	11	3	100	86	536
Grenfell-Walseley.....	4.5	163	62	18	42	6	3	55	74	423
Neudorf-Lemberg.....	5.8	119	69	13	25	6	2	25	72	331
Humboldt "A".....	5.5	150	116	16	46	7	13	35	104	487
Humboldt "B".....	6.1	123	83	10	43	2	7	16	53	337

*Compiled from published surveys of the Farm Management Department, University of Saskatchewan, and from unpublished materials of the Kindersley, Turtleford, Davidson, Richmond, and Maple Creek surveys lent by Dr. William Allen. For a more detailed analysis of cash expenditures see individual tables for each district in appendix.

†Includes contributions for charitable and religious, personal, social, and recreational purposes together with some educational expenditures and one-half the total expenses incidental to operation of a farm automobile.

level (table xxxv). The surveys were made in the summer months each year so that the data collected cover the preceding twelve months instead of a given calendar year; for instance, the 1930 surveys cover approximately the last half of 1929 and the first half of 1930. It has been necessary to adjust index numbers so indexes based on the average of the prices obtaining in the last six months of 1929 and the first six months of 1930 have been used as bases for each item of expenditure. No adjustments were required for the Kindersley and Turtleford surveys. For the important item of food the ordinary indexes published by the Dominion Department of Labour and the Dominion Bureau of Statistics and based on urban requirements give too much weight to products such as meat, butter, eggs, cream, milk, and vegetables which are not ordinarily purchased by the farm family, and as the prices of such primary products declined more rapidly than the prices of staple groceries an index that included the former would show a much greater drop than one which was made up largely of staple groceries such as tea, coffee, sugar, flour, dried fruit, etc., which the farmer must purchase. A food index constructed from prices of foodstuffs which Saskatchewan farmers actually buy has been built up. Differences in urban and rural clothing were eliminated by using an index based on 38 items of Saskatchewan farm clothing.¹³ Fuel and light expenditures were adjusted on the basis of average monthly prices for Saskatchewan,¹⁴ bituminous coal being given a weighting of 80, cordwood, 10, and kerosene, 10. A rather more generous reduction in the cost of health services than that recorded for the province by the Dominion Bureau of Statistics has been allowed.¹⁵ The figures of the Department of Labour on the average monthly wages of female farm help in Saskatchewan were used to adjust the payments to domestic help.¹⁶ Automobile expenses chargeable to living costs were corrected in terms of price

¹³These food and clothing indexes were supplied by the Internal Trade Branch of the Dominion Bureau of Statistics, Ottawa, Aug., 1937.

¹⁴Information by correspondence from the Statistician, Department of Labour, Ottawa, Nov., 1935.

¹⁵See *Prices and Price Indexes, 1913-34* (Ottawa, Dominion Bureau of Statistics, 1936), pp. 135-8.

¹⁶See *Wages and Hours of Labour in Canada: Report no. 19* (Ottawa, Department of Labour, 1936), p. 91.

TABLE XXXV
AVERAGE CASH LIVING EXPENDITURES FOR 2,032 FARM FAMILIES IN 14 DISTRICTS OF SASKATCHEWAN ADJUSTED ON THE
BASIS OF THE 1929-30 PRICE LEVEL

District	Food	Clothing	Fuel and light	Health	Domestic help	New fur- nishings	Life insurance	Misc.	Total
Kindersley.....	\$365	\$157	\$90	\$46	\$23	\$61	\$83	\$225	\$1,050
Turtleford.....	406	164	22	53	11	48	40	173	917
Davidson.....	325	116	103	67	42	7	125	166	951
Richmond.....	316	144	81	68	19	12	48	184	872
Maple Creek.....	329	120	54	48	14	15	55	183	818
Rosemount and Reford.....	311	128	77	39	23	6	55	112	751
Scott.....	242	88	100	48	15	1	76	109	679
Wellington.....	196	68	68	31	2	0	28	47	440
Brokenshell.....	211	67	58	17	12	2	46	73	486
Balcarres-Indian Head.....	237	78	54	67	28	3	100	98	685
Grenfell-Wolseley.....	233	76	21	47	15	3	55	86	536
Neudorf-Lemberg.....	170	84	15	28	15	2	25	84	423
Humboldt "A".....	203	145	19	51	19	13	35	117	602
Humboldt "B".....	166	104	12	48	6	7	16	60	419

changes in Saskatchewan gasoline, tire and repair prices,¹⁷ and motor licence fees. Expenditures classified as for personal and educational purposes presented difficulties since recognized indexes failed to give much assistance but any possible error in dealing with these items will have arisen out of allowing for very substantial reductions in prices. No attempt has been made to adjust premium payments on life-insurance policies or contributions for charitable and religious purposes, while the trifling sums spent on new furnishings in the later years have obviated the need for any corrections for price changes in this item.

A comparison of tables xxxiv and xxxv suggests that while cash living expenditures have been drastically reduced the reduction in volume of purchases is not as great as might be deduced from a study of simple budgetary figures since the purchasing power of the farm dollar, especially in terms of food and clothing, rose fairly rapidly over the period of the surveys.

However, a number of further considerations must be taken into account before any attempt is made to interpret the cost of living data presented in these tables. Although the various districts taken collectively may represent a fair cross-section of Saskatchewan agriculture, it was not possible to bring out in table xxxiii all the differences in the length and intensity of economic development or to indicate special circumstances which might be expected to affect the relative economic status of a given community. Economic conditions and the standard of living at Davidson in 1931, for instance, cannot be regarded as typical, even for that year, of the drought area since Davidson was a well-established farming community which had accumulated greater resources in years of prosperity than had the average district. Furthermore, a more recent survey would undoubtedly reveal a great deterioration in living standards as the territory has suffered repeated crop failures since the date of the survey. The Scott, Wellington, and Brokenshell districts studied in 1932 made up one block of agricultural territory as was again the case in 1933 with the Balcarres-Indian Head, Grenfell-Wolseley, and Neudorf-Lemberg surveys, but in each year differences in soil, in economic development, in the size of the farm unit, and in the racial composition of the agricultural community

¹⁷Information by correspondence from the Internal Trade Branch, Dominion Bureau of Statistics, Ottawa, Nov., 1935, and from *Prices and Price Indexes, 1913-34*.

made separate treatment highly desirable.¹⁸ In the year immediately preceding the Scott, Wellington, and Brokenshell surveys, that area had suffered a complete crop failure, but the Balcarres-Indian Head, Grenfell-Wolseley, Neudorf-Lemberg area, although badly hit in 1931, had harvested a fair crop in the year before the survey.¹⁹ In 1934 the Humboldt area (although divided on the basis of soil type for survey purposes) "was selected chiefly because it had escaped the crop failures and grasshopper damage which had proved so burdensome to a large portion of the province in recent years".²⁰

It is difficult to detect from these surveys any important differences in standards of living that can be directly attributed to differences in national origin, nor is it easy to establish a solid factual basis for the reputations for thrift and good management commonly enjoyed by certain racial groups and not by others. In the final analysis productivity of the soil of a district would appear to be much more important than racial origin in determining the standard of living. Table xxxvi shows the percentage classifications of farm operators for each survey by racial origin and country of birth-place respectively. Farmers of Anglo-Saxon origin predominated in nine districts but the remaining districts were overwhelmingly foreign. Operators of German origin achieved almost solid national *bloc* formations at Humboldt and Neudorf-Lemberg and were the most important non-Anglo-Saxon group in every district but Wellington where they gave place, along with the Anglo-Saxons, to the Polish group. The Scandinavians were fairly well represented in nearly every district, but, apart from the French which made up 6 per cent of the farm operators at Turtleford and Grenfell-Wolseley, other racial groups had very scanty representation. When classified according to birth-place, operators born in Canada, the British Isles, and the United States accounted

¹⁸"The areas were selected for this research chiefly because soil conditions within these adjacent municipalities are representative of three important types—the very desirable heavy 'Regina Clay', which predominates throughout the Municipality of Scott; the intermediate 'Estevan Loam', general in Wellington; and the problematical 'Trossachs Clay Loam' of Brokenshell" (*Report no. 2*, p. 5). "It was found advisable to divide the study into three sections, based on the general agricultural conditions which prevailed" (*Report no. 3*, p. 5).

¹⁹The 1929 and 1930 crops had been below the 15 year average of each district in both these areas.

²⁰*Report no. 4*, p. 5.

TABLE XXXVI

PERCENTAGES OF FARM OPERATORS BY NATIONAL ORIGIN AND BIRTH-PLACE, BY DISTRICTS: SURVEYS OF 1930-4

District	RACIAL ORIGIN				BIRTH-PLACE		
	Anglo-Saxon	German*	Polish†	Scandinavian	Other	Canada	U.S. Europe
Kindersley.....	76	8	2	5	9	52	15 8
Turtleford.....	63	15	2	10	10	28	15 22
Davidson.....	70	10	4	6	10	48	23 12
Richmond.....	22	60	3	12	3	9	25 55
Maple Creek.....	65	16	2	11	6	30	35 15
Rosemount and Reford.....	50	25	10	5	10	31	16 33
Scott.....	53	29	2	6	10	41	27 33
Wellington.....	20	12	50	12	6	25	15 55
Brokenshell.....	60	16	2	14	8	43	21 19
Balcarres-Indian Head.....	89	5	2	..	4	75	5 5
Grenfell-Wolseley.....	72	18	..	..	10	53	3 18
Neudorf-Lemberg.....	12	83	5	..	..	37	6 2 55
Humboldt.....	6	80	8	2	4	9	31 58

*Includes operators of Austrian origin, making up an important part of the totals at Rosemount and Reford and Neudorf-Lemberg.

†Includes a small number of Russians in a few districts.

for more than two-thirds of the total in nine districts but the Richmond, Wellington, Neudorf-Lemberg, and Humboldt districts remained predominantly foreign. Families were large in each of these four districts.

The size and age composition of the farm family or farm household will, of course, affect the standard of living of the individual members. The average number of resident members of the farm family varied from a minimum of 4.0 at Maple Creek to a maximum of 5.8 at Neudorf-Lemberg but there was comparatively little deviation from the mean of 4.5 members per family for communities where the Anglo-Saxon element predominated. Hired help was not included and although at any time it would normally make up a relatively small part of the average farm household significant variations depend on the size of farms and of families, crop-yields, and, especially during recent years, the price of wheat. However, farm family labour contributed from 75 to 95 per cent of all labour used on the farms in these surveys and in no survey did hired labour account for much more than one-half an adult unit in the farm household.²¹

The type of farm tenure has a definite relationship to the

²¹"In 1930 and 1931, studies were made in four districts covering the businesses of the preceding crop year, for which the amount of paid labour averaged 4.5 months per farm, costing about \$228 per farm for wages and \$45 for the cash cost of board. . . . Studies relating to the crops of 1931 and 1932 . . . showed 3.25 months hired per farm, costing about \$76 per farm for wages, and \$18 for cash outlays in connection with the board supplied. . . . Because of adverse weather, poor prices and difficulties of financing, and the presence of sufficient unpaid family labour to do most of the work, the hired help was reduced to the minimum despite the reduced wage rates" (*Report no. 3*, pp. 22-5). Information on the average value of the board of hired labour, which should be deducted from the cash living expenditures of the farm family as given in table xxxiv, is available for several districts as follows: Rosemount and Reford, \$38; Scott, \$16; Wellington, \$10; Brokenshell, \$5; Balcarres-Indian Head, \$30; Grenfell-Wolseley, \$19; Neudorf-Lemberg, \$8; and Humboldt, \$13. Approximately \$45 might be deducted for the board of farm labour from the Kindersley, Turtleford, Davidson, Richmond, and Maple Creek cash living averages. The adequacy of the family as a unit of comparison in standards of living studies has been questioned but the adult-unit has also been criticized as failing to take account of the variations in individual demands due to age and sex requirements. In view of this criticism and the difficulty of making accurate adjustments in all cases for farm help boarding with the family, the farm family has been accepted as the basis of comparison in all discussion of these surveys. See Kirkpatrick, *The Farmer's Standard of Living*, pp. 20-6.

farmer's standard of living. An analysis (table xxxvii) of the surveys made in 1932, 1933, and 1934 shows that cash living expenditures were very much lower in every case for tenants and also that in six out of the nine surveys expenditures were highest on partly-owned, partly-rented farms.²² The difference between the living standards of owners and tenants is probably less than the respective cash living costs would indicate since in each of these communities the average age of tenants was from 6 to 13 years less than the average age of owners,²³ and tenants, being younger, might be expected to have somewhat smaller or—since the age composition would in any event be lower—less expensive families to support. It has already been noted that the proportion or distribution of the different types of tenure varies widely from one part of the province to another, and table xxxvii shows how distribution can vary greatly within a few miles as in the case of the contiguous municipalities of Scott, Wellington, and Broken-shell²⁴ or the adjoining districts of Balcarres-Indian Head, Grenfell-Wolseley, and Neudorf-Lemberg.²⁵ Thus the distribution of land tenure will affect the average living standards of different districts unequally.

It is difficult to measure accurately at any time and for any community the value of the non-cash contributions made to the family living from the farm, and the cost-of-living tables given for these surveys do not include these items. In extensive studies in the United States, "usually from one-third to one-half of the farm family's living represents food products, use of the house and fuel

²²See above, chap. iv, sec. 2, for a discussion of certain features of tenancy in Saskatchewan.

²³See *Report no. 1*, p. 8; *Report no. 2*, p. 8; *Report no. 3*, p. 8; *Report no. 4*, p. 8.

²⁴"The high values of the farm lands at Scott, resulting from their great productivity, make for higher proportions of tenancy. Many of the Polish settlers of Wellington had little cash when arriving, and are gradually building up their farms, and rent land nearby whenever available" (*Report no. 2*, p. 11).

²⁵"The high percentage of tenants in the Indian Head and Balcarres study results partly from the higher valuations placed on land in this area, and partly from the desire of the original owners to retain possession of their farms which have been generally decidedly remunerative. An indication of the profitability of these farms is seen in the continued residence on the farms of retired farm owners for whom separate homes have been erected. A number of tenants have been renting these better class farms for periods of 15 years or longer, in both the Indian Head-Balcarres and the Grenfell-Wolseley areas" (*Report no. 3*, p. 11).

TABLE XXXVII

AVERAGE CASH LIVING EXPENDITURES FOR DIFFERENT TYPES OF TENURE IN
SASKATCHEWAN : SURVEYS OF 1932, 1933, AND 1934

District	OWNERS		PART-OWNERS		TENANTS	
	Per- centage of all farms	Cash living expendi- ture	Per- centage of all farms	Cash living expendi- ture	Per- centage of all farms	Cash living expendi- ture
Rosemount and Reford*	64	\$598	26	\$613	10	\$428
Scott*	53	604	20	625	27	421
Wellington*	41	403	33	356	26	277
Brokenshell*	64	393	22	451	14	319
Balcarres-Indian Head	48	628	12	649	40	388
Grenfell-Wolseley	69	446	12	449	19	322
Neudorf-Lemberg	79	352	12	274	9	232
Humboldt "A"	65	501	24	522	11	331
Humboldt "B"	63	350	26	349	11	231

*Board of paid labour excluded.

furnished from the farm",²⁶ but this conclusion was based on a more diversified agriculture than that which prevails over most of Western Canada and especially the prairie regions. Estimates of farm contributions are available for some of the earlier Saskatchewan studies carried out in co-operation with the Canadian Pioneer Problems Committee, in which 10 per cent of the value of the farm-house was assigned as rent and current retail prices in the country districts were used to determine food and fuel prices. It was estimated that the farm contributed 28 per cent of the total family living expenses at Kindersley in 1930; approximately 33 per cent at Turtleford in the same year and at Davidson in 1931;²⁷

*Kirkpatrick, *The Farmer's Standard of Living*, p. 53.

²⁷See Murchie *et al.*, *Agricultural Progress on the Prairie Frontier*, pp. 223-4, 248-9, and 263-4. Farm contributions for the Manitoba surveys published in this volume were much higher than for any of the Saskatchewan studies, amounting to approximately 40 per cent of the total farm living for 197 farms in the Swan River Valley (1930) and 157 farms in the Red River Valley (1931) surveys, and to nearly 45 per cent for 228 farms at Dauphin (1930) and 221 farms on the Riding Mountain Fringe (1931). Fuel was available on the farms in all the Manitoba surveys.

and 31 per cent at Maple Creek in 1931.²⁸ In the 1930 studies the lower proportion supplied by the Kindersley farms is a result of the more highly specialized grain-farming operations typical of the prairie plains. Furthermore Kindersley farmers found it necessary to buy all their fuel whereas at Turtleford wood was available on most farms. In the 1931 studies the relatively high proportion supplied by the Davidson farms resulted from the high rental value charged against the well-built farm-houses of that district as compared with the small rentals calculated on the much cheaper structures found at Maple Creek.²⁹ Shrinking cash incomes probably account for the increase in the proportion derived directly from the farms in the 1931 over the 1930 surveys; the values of cream, butter, eggs, meat, and other farm produce had dropped sharply and the decline in the volume of groceries purchased (see tables xxxiv and xxxv) appears to have been partially compensated for by an increase in the amount of farm produce utilized at home.

In the surveys carried out since 1931, the information available on non-cash contributions to the family living in each community is limited to estimates of the average rental value of the farm-house and to the value of meat produced and consumed on the farm.³⁰ It is unsafe to take the Kindersley, Davidson, and Maple Creek surveys as completely representative of the situation on the prairies in subsequent years, as further price declines resulting in a lower standard of living might tend to increase still further the relative importance of farm contributions. On the other hand, in the dried-out areas the proportion of cash outlays to the total living costs probably rose, since drought means a failure of gardens and of forage crops necessary for dairy and livestock production so that in communities such as Scott, Wellington, and Brokenshell "living standards were even more seriously encroached on than is repre-

²⁸See C. A. Dawson *et al.*, *The Settlement of the Peace River Country* (Toronto, 1936), p. 127. For 124 farms at Olds, Alberta, in the same year as the Maple Creek study the farm contribution was also 31 per cent as against 35 per cent for 313 Peace River farms in 1930. Fuel was partly a non-cash item for each Alberta district.

²⁹The average annual rental value of a farm house at Davidson was estimated at \$201 as against \$100 at Maple Creek, making up 15 per cent of the total living costs at Davidson and 9 per cent at Maple Creek. House rental values made up 9 per cent of all living expenses at Kindersley and 8 per cent at Turtleford.

³⁰For details see appendix.

sented in the statements of living costs".³¹ In the park belt, drought has not been so severe at any time but all the other forces including variations in the prices of cereal crops, together with variations in the prices and values of other farm produce, have been in evidence and make estimates of the proportions of family living derived from the farm of doubtful value. However, while in the prairie districts since 1931 the proportion of non-cash contributions has probably fluctuated between 20 and 35 per cent depending on climatic conditions, park belt farms have probably contributed an average of at least 35 per cent to the total family living.

In the absence of complete data on the value of farm contributions for all surveys, the application of any recognized laws of consumption to the cash expenditures alone could scarcely be expected to throw much light on the trend of rural standards of living since the beginning of the depression. Furthermore, it is necessary to remember that the cash living expenditures in the different districts represent merely community averages; no arrangement of the farms into living expenditure groups has been attempted for any district, though the survey materials show the range to be very great even for farms of the same size and type in each of the studies.³² In table xxxviii, showing the percentage distribution of the various classes of cash living expenses for each of the surveys, the greatest variation occurs in the outlays on fuel and light since in park belt districts such as Turtleford, Neudorf-Lemberg, and Humboldt where wood was available for fuel a larger proportion of the total income might be applied on other things. The Turtleford farmers apparently preferred to spend this "surplus" from fuel chiefly on food, though in comparison with most other districts clothing expenditures also gained; at Neudorf-Lemberg and Humboldt the "surplus" seems to have gone largely into clothing and for the less vital goods and services included in the miscellaneous group.³³ In all other districts the proportion spent on the miscellaneous group declined significantly as total cash living expenditures fell.

Since each survey covers the cash living expenditures of a given

³¹*Report no. 2*, p. 27.

³²William Allen, correspondence, Nov., 1935.

³³Large families at Neudorf-Lemberg and Humboldt probably affected the increased relative importance of clothing expenditures.

TABLE XXXVIII

RELATIVE IMPORTANCE OF VARIOUS CLASSES OF CASH LIVING EXPENDITURES :
SURVEYS OF 1930-4
(in percentages)

District	Food	Clothing	Fuel and light	Health	Life insurance	Misc.
Kindersley	35	15	8.5	4.5	8	29
Turtleford	44	18	2.5	6	4.5	25
Davidson	32	12.5	11.5	7.5	14	22.5
Richmond	34	17	10	8	6	25
Maple Creek	38	15	7	6	7	27
Rosemount and Reford	36.5	18	11	6	9	19.5
Scott	31	13.5	15.5	8	13	19
Wellington	39	16.5	16.5	8	8	14
Brokenshell	38.5	15	13	4	11.5	18
Balcarres-Indian Head	31	12	8.5	11	18.5	19
Grenfell-Wolseley	38.5	15	4.5	10	13	19
Neudorf-Lemberg	36	21	4	7.5	7.5	24
Humboldt "A"	31	23.5	3	9.5	12	21
Humboldt "B"	36.5	24.5	3	13	5	18

district for only one year, it has not been possible to measure the deterioration, during the course of the depression, of the standard of living in any of the different communities. Attempts to indicate the general trend by arranging the surveys chronologically are open to many objections arising out of the different economic background supplied by each district. On the basis of past production of farm incomes, Kindersley (1930), Scott (1932), and Balcarres-Indian Head (1933) might be grouped together as representative of the best soil and income-earning types,³⁴ but the resulting picture would be distorted by the abrupt reduction in standards of living forced upon the Scott district by the complete failure of all crops in 1931. A second and lower income-earning group made up of Turtleford (1930), Davidson (1931), Rosemount and Reford (1932), and Grenfell-Wolseley (1933) gives communities which may be more readily compared³⁵ despite considerable variations in crop

³⁴See Allen *et al.*, *Studies of Probable Net Farm Revenues*, pp. 20-1, 28-9.

³⁵*Ibid.*, pp. 10-1, 16-19, 24-5. Wellington (1932), though strictly comparable with other districts in this group on the basis of soil and past production, has been excluded because of the complete crop failure which brought the average living standard down to what was virtually a relief level.

yields and the fact that two of the districts had a definite advantage over the other two with respect to fuel. This group may be of some significance in indicating the downward trend of living standards on all Saskatchewan farms. The reduction from the Turtleford level was slightly greater than tables xxxiv or xxxv would indicate because of the somewhat larger farm households found in the other districts. Even after allowance has been made for the unusually high expenditures on food at Turtleford, the decline in such purchases is unmistakable in the later years. That Davidson in 1931 was already beginning to feel the pinch of poor crops and low prices is reflected in the smallness of expenditures on clothing and new furnishings, but it became necessary to cut purchases of both items much more drastically at Grenfell-Wolseley two years later. Health expenditures and payments for domestic help showed sharp reductions in the 1932 and 1933 surveys. In the miscellaneous group, which includes those items which are considered the best indicators of a high standard of living, a steady decline is evident so that Grenfell-Wolseley in 1933 spent less than half as much as Turtleford had spent in 1930, disbursements for educational, religious, and charitable purposes showing the smallest decline while the curtailment of personal, social, and recreational expenditures was most pronounced.³⁶

2. FOOD AND CLOTHING

Before the depression, farm contributions accounted for between 40 and 50 per cent of the total value of all food requirements on farms of the prairie region. The limitations to diversification imposed by climatic conditions were reflected in the diet of the farm family. There was a rude plenty of salt pork, eggs, milk, cream, and butter in summer, and of frozen beef and potatoes with reduced supplies of dairy products in winter. Farmers made very few purchases from the meat markets of the villages and towns, but in some communities a weekly supply of fresh meat through the summer months might be secured through a measure of informal local co-operation in the form of a "beef-ring".³⁷ On the majority of farms cream was looked upon as a luxury and little was con-

³⁶For a detailed analysis of these items for each community, see appendix.

³⁷Each member of the "ring" in turn contributes an animal for butchering and division among the members, a small fee being levied to cover the cost of butchering and of cutting up the meat.

sumed either in summer or winter, nearly all of it being reserved for churning into butter or for shipment to the nearest creamery. The chief defect in the diet of the rural population was the preponderance of starches and meats and the inadequate supplies of leafy vegetables and fresh fruits. Wild or native fruits were rarely found on the open prairie although "Saskatoonberries" grew readily in sheltered river and lake valleys. The deficiencies of the farm garden were partly overcome in prosperous years by fairly substantial purchases of canned tomatoes and canned corn, of dried fruits such as prunes and evaporated apples, of fresh fruit in the fall for preserving, and of apples for winter consumption.³⁸ Gardens began to show improvement in well-established communities as more time could be spared from the cultivation of field crops; trees were planted, which in addition to improving the appearance of the farmstead formed an effective "wind-break" or "shelter belt", both for the farm-house and the farm garden,³⁹ making possible a much greater production of vegetables and the cultivation of small fruits specially adapted to the region.⁴⁰

The collapse of wheat prices forced the prairie farmer to curtail cash expenditures on food, though, with the decline in the prices of cream, butter, eggs, meat, and other farm produce, partial compensation might have been expected in an increased consumption of farm produce on the farm. Protracted drought effectively prevented such an adjustment over most of the area and sharply reduced the proportion of farm contributions. "There is virtually nothing in the rolling hills and valleys at Buffalo Gap and Big Beaver, which are near the U.S. border due south of Bengough. Gardens were a failure. Potatoes will have to be brought in. . . . One man told of children whom he knew, who

³⁸Fresh fruit has always been regarded as a definite luxury and even in the "good" years farm children seldom saw oranges from one Christmas to another.

³⁹See "Horticulture" (*Guide to Saskatchewan Agriculture*, Department of Agricultural Extension, University of Saskatchewan, Saskatoon, 1936, pp. 76-81). "The wind-break has a threefold use: garden protection, home protection, and beautification of the farmstead" (Dawson, *The Settlement of the Peace River Country*, p. 140).

⁴⁰These include the wild or native raspberry and gooseberry and adapted varieties of strawberries, raspberries, gooseberries, red and white currants, sandcherries, Siberian plums, and small crab-apples. See C. F. Patterson, *Hardy Fruits: With Special Reference to their Culture in Western Canada* (Saskatoon, 1936), *passim*.

had not tasted any other vegetables than potatoes for over two years. Meat, bread and potatoes form the diet of the majority it was stated, but this year it is feared that the meat will often be lacking and the potatoes as well. Such is the progressive effect of six years of drought."⁴¹ Under such circumstances direct relief quickly became necessary if starvation was to be averted, though the standard of living was often actually lower for the very large marginal group that managed to avoid relief or for those who were just about to be pushed on to relief, than for actual relief recipients, though relief schedules have not been extravagant. The maximum food allowance for a family of five for one month under the Saskatchewan Relief Commission in 1933-4 was \$10 plus one 98 lb. bag of flour; under the Bureau of Public Welfare of the Department of Municipal Affairs it was \$13.15 in 1935; \$16.50 in 1936; and \$20.20 in 1937 with no separate allowance for flour. In each case if the applicant had meat, 10 per cent was to be deducted from the allowance; if dairy products, a further 10 per cent; if potatoes, 5 per cent; "where it is practicable for the relief recipient to have wheat gristed, no order for flour should be issued".⁴² Under the Relief Commission no purchases of fruit of any kind or of vegetables (other than potatoes and dried beans) were permitted;⁴³ the Bureau of Public Welfare has allowed the recipient "a consumer's choice", simply pointing out that the "food allowance must not be exceeded in any instance". Medical men have reported evidence of malnutrition, particularly among children, in

⁴¹D. B. MacRae and R. M. Scott, *In the South Country: A Reprint of a Series of Articles which Appeared in the Winnipeg Free Press, Regina Leader-Post, and the Saskatoon Star-Phoenix in September, 1934, as the Result of a Tour of the Drought-stricken Districts of Saskatchewan and Manitoba* (Saskatoon, 1934), pp. 18-20. D. B. MacRae is Editor of the *Regina Leader-Post* and R. M. Scott was Assistant Agricultural Editor of the *Winnipeg Free Press*.

⁴²*Food Schedule for Rural Municipalities, Villages and Towns; Maximum Food Allowance for One Month, 1935* (issued by the Bureau of Labour and Public Welfare, Department of Municipal Affairs). See also schedules for 1936 and 1937.

⁴³See Saskatchewan Relief Commission Schedules: "Following merchandise only will be supplied to above totals: Potatoes, beef, pork, fish, butter, sugar, rolled oats, salt, tea, coffee, jam or honey, beans, pot barley, corn meal, yeast, baking powder, pepper, soap, coal oil, matches, epsom salts and saltpetre." (The schedules all provide for a sliding scale for families of from 1 to 14 persons.) The Commission probably presumed that a minimum of vegetables and fresh fruit would be supplied through the Saskatchewan Voluntary Rural Relief Committee; see above, chap. v, sec. 4.

the drought area and have emphasized deficiencies in diet. In September, 1937, the federal Minister of Agriculture stated that "there have been reports from prairie medical men that they have seen signs of scurvy for the first time. It is not on a widespread scale and the number of cases is not available. It is apparent, however, that there has been a shortage of vegetables and fruit in the diet of people on relief."⁴⁴ To meet this situation the federal government distributed 782 cars of fruit, vegetables, cheese, fish, and beans to supplement food supplies and food relief schedules in the Saskatchewan drought areas.

The hardships of depression have been pronounced in the case of clothing since this is entirely a cash expenditure. Even in more prosperous days the clothing of the farmer and his family came from the mail-order house or the local "general store" and was chosen with a view to cheapness and utility, while in many farm homes flour sacks provided the material for aprons and much of the bed linen. Apart from working clothes, the farm family did not spend much on clothing. The high cost of working clothes, of overalls and boots for men, and the rigours of a prairie winter made clothing expenditures relatively high, since men cannot work in zero or sub-zero weather and children cannot walk or drive a distance of from one to four miles to school and back unless they are warmly clothed. Clothing expenditures could be drastically cut down or even postponed for a year but the cumulative effects of poverty are apparent in every part of the prairie region.⁴⁵ At Cadillac, Kincaid, and Gravelbourg, in 1934 most of the farmers had been on relief for from three to five years: "This means that replacement of things in the home has been at a low point, or practically not at all. This is the most aggravating feature of the drought. One farmer described the situation as 'patching up old clothes with clothes already patched, only to find that the garment

⁴⁴The Hon. J. G. Gardiner, as reported in the *Regina Leader-Post*, Sept. 23, 1937.

⁴⁵For those forced to accept relief the clothing schedules of the government relief authorities allowed \$9.00 per year for an adult, \$6.25 for a boy, \$5.25 for a girl, and \$2.50 for an infant, with a maximum per family for large families of \$75 in 1933-4, and \$54 in 1934-5. By 1937 the clothing schedules had been increased to \$14 for the first adult and a maximum of \$140 for a family of 20. These grants have been supplemented by the contributions made through the Saskatchewan Voluntary Rural Relief Committee for a discussion of which see above, chap. v, sec. 4.

had given away somewhere else'. Examples are everywhere, but repetition of them would not ease the circumstances. Clothing and bed clothes are badly needed."⁴⁶ In the Mortlach-Chaplin area just west of Moose Jaw, "clothing has been reduced to a minimum and bed clothes are reported as a great necessity, being but a remnant of what they once were and worn thin with age. Bare necessities have been the rule during the past few years. Farm homes such as these have never been run on a lavish scale. The people live simply and modestly, so reduction from their scale of living means more to the farmer and his wife and family than would at first appear."⁴⁷ Much further south and east, in the Bengough area, conditions were even worse. "In some farm houses near the United States border . . . information was given of cases where one girl wore 'the' dress to school one day while the sister stayed at home. Next day they alternated, one staying at home and one going to school. Even the tea kettle is worn out and has been replaced by a lard pail. Broken panes of glass have been replaced with cardboard."⁴⁸

3. HOUSING AND HOUSEHOLD FURNISHINGS

The farm-houses of the prairies are much smaller than those found in other parts of Canada. "The large six room dwelling is predominant in the Maritimes and Ontario, where there is least evidence of crowding, and conversely, on the prairies where three and four room dwellings predominate, there is definite evidence of inadequate living space, particularly in rural areas. . . . Over 60 per cent of prairie rural homes contain four rooms or less, while the number of such homes in Ontario is less than 23 per cent. In Alberta and Saskatchewan there are more rural households occupying two rooms than in any other room group."⁴⁹ As might be expected, the room space per person is less in the Saskatchewan wheat belt than anywhere else in the Dominion.⁵⁰

⁴⁶MacRae and Scott, *In the South Country*, p. 14.

⁴⁷*Ibid.*, p. 7.

⁴⁸*Ibid.*, p. 18.

⁴⁹*Seventh Census of Canada: The Housing Accommodation of the Canadian People* (Ottawa, 1935), pp. 3, 8.

⁵⁰*Ibid.*, p. 6. The rooms per person for the rural population of the different provinces are as follows: Prince Edward Island, 1.65; Ontario, 1.53; Nova Scotia, 1.49; New Brunswick, 1.29; British Columbia, 1.17; Quebec, 1.05; Manitoba, 0.93; Alberta, 0.88; Saskatchewan, 0.84.

The size of the farm-houses is partly a reflection of pioneer conditions and the relatively short period of settlement, partly a result of the high cost of lumber and other building materials, and partly a consequence of the absence of any fuel on prairie farms to ease the expense of heating through long cold winters. The sod-shack, characteristic of early plains settlement, was the prairie equivalent of the log cabin of wooded areas. The durability of the sod-shack was definitely limited and it has practically disappeared from the prairie landscape being replaced by the frame house of one- or two-storey construction.⁶¹ The change did not always represent an improvement, for although nearly every community possesses attractive farm-houses, these are generally outnumbered by the small, unpainted, dreary, wooden shacks inadequate in size or warmth of construction properly to house the farm family.

The development of a typical district and the tremendous variations in the housing conditions of farm families have been described in the following passage:

Building construction in the Kindersley district commenced when the homesteading period began, in some cases before the railroad reached the area. The earliest date of erection of a farm home, on the farms included in this survey, was 1907, although some settlers had been located in this district before this date. In some of the earliest shelters local building material was used, and shacks and barns had walls of sod, and sod-covered board roofs. When properly built with suitable sod, these buildings proved warm in winter and cool in summer. Few traces of these sod erections are now to be found in this district. In many cases small frame shacks, built with a single ply of board and covered with tar paper were sodded around to insulate and protect until more prosperous days permitted the buildings to be properly completed. The erection of the general farm buildings was strictly limited to actual farm needs during the pioneer period, excepting for the few settlers who came generously supplied with funds. By 1915 some considerable development of farms had been made. In that year the Kindersley area experienced its first "bumper crop" for which a good price was obtained. The returns from this crop stimulated building throughout the district for several years.

⁶¹Less than one per cent of prairie farm houses are of stone, brick, brick veneer, or cement block construction. In many of the South, Eastern, and Central European communities (located largely in the park belt), buildings are fashioned upon the models of the country from which the settlers came, but there is a strong tendency for the thatched roof, log and clay or lumber and clay dwellings of the Ukrainians and the Russians to be replaced by a standardized Canadian house when the family fortunes will permit of the transition. The log cabin of the park belt and the wooded zone survives only on the northern fringe of settlement.

. . . The farm buildings of the Kindersley district vary widely in quality. Farms with excellent buildings are frequently located adjacent to farms having only the minimum of buildings for farm needs. Within a few miles are to be found adequate homes with fully modern equipment and small shacks with the most limited of facilities for household requirements. . . . Estimates on the cost of building homes on these farms ranged from \$50 for a bachelor's shack to \$8,000 for a fully modern home. Twenty-five per cent of the homes cost \$2,000 or more to erect, but 21 per cent cost less than \$500. . . . The poorer buildings are generally located on the smaller farms. Many of the pioneer aspects of this district are still in evidence.⁵³

The quality of farm-houses shows a great variation from district to district, depending partly on the stage of economic development, but more fundamentally perhaps on the income-earning capacity of the soil. On the choice wheat lands of the Regina plains and in the well-established Davidson area, the average investment in houses, which are nearly all of frame construction, is in excess of \$2,000.⁵⁴ Mature communities on good land such as Indian Head and Balcarres, Grenfell and Wolseley support comparable housing investments.⁵⁴ Kindersley with farm-houses possessing an average value of \$1,300 occupies a position roughly mid-way between these better districts and the cheaper structures found on the marginal wheat lands of the Maple Creek and Brokenshell areas.

In all communities the depression meant the cessation of construction and the neglect of painting and repairs. In a survey including 832 farm-houses in seven rural municipalities in south-west central Saskatchewan in 1935, the condition of 13 per cent of the houses was reported as good; 41 per cent as fair; and 46 per cent, poor. "The effect of six years of successive partial or total crop failures is reflected more readily in the condition of the farm buildings than in any other visible factor. It is practically impossible to maintain the buildings on the prairie farms without some cash outlay each year. When the income from the farm is reduced, one of the first things to be neglected is the upkeep of the

⁵³Murchie *et al.*, *Agricultural Progress on the Prairie Frontier*, pp. 234-6.

⁵⁴See appendix giving average rental value of houses for surveys since 1930 based on 10 per cent of total value of house.

⁵⁵"Many substantial and attractive homes are to be found at Indian Head, and Balcarres, and at Grenfell and Wolseley, stone or brick exterior being reported on 30 per cent of the former and 13 per cent of the latter" (*Studies of Farm Indebtedness Report no. 3*, p. 13).

farm buildings.”⁵⁵ The winter fuel problem, always acute on the prairie plains, was intensified with the decline in cash income, and unrepaired houses have added greatly to the discomfort of farm families and to the relief fuel bills of governments.⁵⁶

The primary consideration in the construction of a prairie farm-house is that it may be kept reasonably warm with the typical and inexpensive but uncomfortably primitive heating system. Only a very small number of farm-houses are equipped with central heating systems, by means of which each room is heated through the circulation of steam, hot water, or, more commonly, by hot air from a furnace in the basement. In the great majority of cases, the coal-burning kitchen range, alone if the house is small, supplemented by a “heater” in the living room⁵⁷ in all larger houses, is relied upon to heat the house. The upstairs rooms in two-storey houses receive warmth from the stove pipes passing through the floor from the range or heater below, a device which adds nothing to the beauty but a good deal to the comfort of the rooms so served.

The furnishings of the average farm home have always been distinctly utilitarian in character. Aesthetic values are likely to be relegated to the background by the pioneer, and the pressure on available time and resources during the early years of settlement places emphasis on the creation of income-earning assets. With the passing of the pioneer stage, most farm-houses continued to show that the family expected to spend little or no leisure time in indoor pursuits. The standardized living-room furniture, rugs, books, pictures, and other furnishings of a modest urban home, were rarely seen and in many cases there was not a single good chair or convenient reading lamp in the house. Undoubtedly part of this general comfortlessness, evident even in relatively prosperous

⁵⁵*Physical and Economic Factors related to Land Use Classification in Southwest Central Saskatchewan* (Ottawa, 1938), pp. 35-6. Condition of the barns on 825 of these farms was: 10 per cent good; 30 per cent fair; and 60 per cent poor.

⁵⁶The provision of winter fuel in the dried-out area has cost governments an average of over \$1,500,000 for the last 8 years. More than 100,000 out of 136,472 Saskatchewan farms reported no forest products of any sort in 1931. See *Census of Canada, 1931. Census of Agriculture, Saskatchewan* (Ottawa, 1936), p. 44.

⁵⁷The living-room generally serves as dining-room as well, though not infrequently the farm kitchen combines the functions of all three.

communities,⁵⁸ must be attributed to lack of interest rather than to lack of funds, indicating that the farm-house is regarded chiefly as a convenient centre for such essential rites as eating, sleeping, and separating the milk. Nevertheless, during the decade prior to the depression a definite trend towards greater emphasis upon improvement of the farm home was evident in many established districts where crop yields had been satisfactory. Though the furniture generally remained cheap and inadequate, more was introduced; improved gasoline and kerosene lamps and occasionally small electric lighting plants⁵⁹ began to replace the small coal-oil lamps; window curtains and rugs became more common; a portion of the garden space was devoted to flowers and shrubs,

⁵⁸This fact has been remarked by many observers. A German writer has described the farm home of a prosperous German-American farmer in a good farming district north of Saskatoon just prior to the depression: "Hank's farm-house was of the so-called better sort. Of course, like nearly everyone else in the country, he had begun with a log house. This was still in existence and was now being used as a storehouse. The new house, like almost all the better farm-houses, was of frame construction. . . . As a practical Canadian Hank had built the new house himself. It was quite spaciouly designed, with two storeys containing seven rooms and a small kitchen. In spite of all its fine outward appearance, the house must have appeared really primitive to any European. Hank had not thought it worth while to paper the walls. The rough, unplanned boards and supports showed through everywhere. The individual rooms were separated from each other by very thin board walls. Ample provision had been made for light since the house possessed eighteen large windows opening upwards. The furniture of the rooms was equally primitive. Here a large rickety table and a few chairs with broken backs, there plain iron beds with woollen blankets or comforters—for feather beds are unknown in this country. The walls of all the rooms were hung with numerous picture calendars, which the farmer receives every year in great quantities from merchants and agencies. The remaining pictures were extraordinarily poor—faded family portraits, wretched lithographs, all nailed up on the walls in hopeless confusion" (translated from Armin O. Huber, *Auf Wilden Pfaden im Neuen Kanada*, Stuttgart, 1931, p. 23).

⁵⁹In the census division which included the Regina plains, 5.8 per cent of the farms reported electric light in 1931. The average for other census divisions of the wheat belt was about 3 per cent including some lighting by gas (see *Census of Agriculture, Saskatchewan*, pp. 44-5). When the Saskatchewan Power Commission was established in 1929, it was hoped that the rapid extension of power lines from the cities of Saskatoon, Swift Current, and North Battleford, to link up smaller urban centres would enable farmers to avail themselves of electric light and power, but depression and high costs of installation have prevented both extension of Commission lines and increases in rural subscribers. In September, 1937, less than 100 farmers were served by the Commission and the private power companies combined.

and house plants began to appear at the windows. But it would be easy to exaggerate the extent of the advance. Cash expenditures were abruptly checked by depression. In the Kindersley area in 1930, 80 per cent of the farms bought new furnishings and the expenditures per farm reporting purchases averaged \$74. In the roughly comparable areas of Scott in 1932 and Balcarres-Indian Head in 1933, only 5 and 14 per cent bought new furnishings and purchases per farm reporting averaged \$28 and \$27 respectively. All other surveys indicated similar declines and a tendency completely to ignore replacements.⁶⁰

4. FARM FACILITIES

Since few prairie farms are equipped with electric power, few farm women can enjoy the use of the multiplicity of domestic conveniences which are considered necessities rather than luxuries by urban housewives. The only labour-saving device found in most farm-houses is some sort of washing machine, a few of which are operated by a small gasoline engine, the majority by hand. For ironing, the heavy old-fashioned sad-iron which can be heated on the kitchen range, is in general use. Running water is seldom found in prairie farm-houses. The division which includes the Regina plains had the best record in the census of 1931 with 2.8 per cent of the farms reporting this convenience.⁶¹ The difficulties and expense of obtaining an adequate and convenient water supply in many of the best wheat-growing districts and of protecting a piped water system from frost in winter are the chief factors keeping the proportion so low. With little domestic help⁶² the absence of

⁶⁰See tables xxxiv and xxxv and appendix for details of expenditures covering all Farm Management Surveys.

⁶¹This division included 8,878 farms of which 249 reported water piped in the kitchen and 224 water piped in the bathroom. For a number of other census divisions in the south-west the proportion was less than 1.5 per cent. See *Census of Agriculture, Saskatchewan*, pp. 44-5.

⁶²Most of the domestic help hired is for the summer season, some only for the peak-load coming at harvest time. Hirings for the year are uncommon. Less than 15 per cent reported any employment of domestic help at Kindersley in 1930; 18 per cent at Maple Creek and Richmond, and 25 per cent at Davidson, in 1931; 21 per cent at Rosemount and Reford, 15 per cent at Scott, less than 5 per cent at Wellington and Brokenshell, in 1932; 22 per cent at Balcarres-Indian Head, and 9 per cent at Grenfell-Wolseley in 1933; and 17 per cent at Humboldt in 1934. In all districts the average period of employment was less than six months. Conditions are frequently unsatisfactory for the "hired girl";

these facilities must of necessity, particularly during the busy season, impose additional burdens on the farmer's wife. However, it must be recognized that in some cases at least this situation is the result of choosing out of limited incomes between facilities giving diversion, enjoyment, and relief from social isolation, such as the radio, telephone, and the automobile on the one hand, and those which are merely labour-saving on the other. This preference is not difficult to understand, especially when the recreational facilities may be enjoyed by all members of the family and are coupled with distinct economic advantages. Thus the radio has a much greater vogue than power washing machines and in 1931 was to be found on more than one-half the farms in the best wheat-growing districts. Radios were much less common in the more scattered farm-houses of poorer districts so that the proportion for the prairie area as a whole did not exceed 25 per cent. All farm facilities are much less common in the east-central section (Yorkton area), with its large South, Eastern, and Central European population and in the district north of the wheat belt, thus tending to weaken still further Saskatchewan's relative position with respect to those facilities. In 1931 Saskatchewan was at the bottom of the list with respect to water piped into farm-houses and electric lighting, but stood only second to Ontario in farm automobiles and telephones, and to Ontario and British Columbia in farm radios (see table xxxix). However, it is extremely doubtful whether she has maintained her relative position with respect to the last three facilities through the depression.⁶³

The economic and social importance of the rural telephone was recognized by the pioneer and though construction costs were high, a network of long distance and rural connecting lines had pretty well covered the prairie region by 1921.⁶⁴ In many of the better well-established districts, 80 to 90 per cent of the farmers had telephones; the proportion fell below 20 per cent for the marginal lands of the south-west, but averaged upwards of 50 per cent for

the hours of labour are unduly long, the work heavy (commonly involving milking and other outside chores), and wages insufficient to offset the attractions of urban employment.

⁶³See G. E. Britnell, *The Western Farmer* (Toronto, 1935), for further comparisons.

⁶⁴See G. E. Britnell, "Public Ownership of Telephones in the Prairie Provinces" (M.A. Thesis, University of Toronto, 1934), chap. iii. Development was not as rapid in the northern part of the province.

the region all through the nineteen-twenties. In addition to saving valuable time, the telephone has helped to break down the loneliness of prairie farms. It has gone far to relieve the sense of social isolation which has naturally been one of the outstanding characteristics of large-scale agriculture and has given a sense of security by linking up the remote farms with centres where medical and other assistance might be available when needed. By facilitating rapid and effective organization, the telephone has been an important factor in the growth and development of the co-operative movement.

TABLE XXXIX

PROPORTION OF FARMS WITH FARM FACILITIES IN CANADA AND EACH OF THE PROVINCES, 1931*
(in percentages)

Province	Auto- mobiles	Tele- phone	Radio	Gas or electric light	Water piped in kitchen	Water piped in bathroom
Canada.....	44.1	32.1	16.4	10.0	11.7	4.9
Prince Edward Island...	30.2	21.6	10.9	4.0	5.6	3.8
Nova Scotia.....	26.1	26.0	12.1	9.5	10.2	4.3
New Brunswick.....	30.6	20.9	7.8	7.4	11.2	4.0
Quebec.....	19.8	19.4	6.3	14.0	31.9	8.2
Ontario.....	65.4	54.1	21.5	16.8	10.4	6.3
Manitoba.....	47.2	24.2	18.1	3.6	1.9	1.5
Saskatchewan.....	47.7	34.2	20.2	2.8	1.4	1.2
Alberta.....	43.9	17.0	17.7	2.8	2.1	1.5
British Columbia.....	40.6	26.5	23.6	24.5	31.2	20.0

*See *Census of Agriculture, Final Bulletin no. XIX* (Ottawa, 1934), pp. 10-11.

Next to the farm home and the rural school⁶⁶ the institution which shows most clearly the impact of depression is the rural telephone. It may be assumed that ordinarily the farmer gives up telephone services with extreme reluctance. "Consider", writes Mrs. Telford of Pelly, "a farmer's financial straits when for \$10.50 a year he will do without a telephone. Perhaps he is 10 or 15 miles from town, perhaps a mile from his nearest neighbour, yet for the sake of that paltry sum, he will face the hazards, the isolation, the social inconvenience of doing without his telephone. I think this

⁶⁶See above, chap. vi, sec. 1.

more than anything else shows our western financial position."⁶⁶ Every effort has been made by the provincial government and the rural telephone companies to stem the loss of farm telephones. Yet between 1930 and 1937 the number of subscribers declined by 50 per cent in the wheat belt. A few widely scattered examples picked at random from the Annual Reports of the Department of Telephones illustrate the general situation. North Forres Rural Telephone Company situated in the Maple Creek area of the south-west declined from 471 subscribers in 1930 to 189 in 1937; the Golden Brae Rural Telephone Company at Gravelbourg in the south-central area dropped from 52 to 14 in the same seven-year period; the Alameda Rural Telephone Company in the south-east, from 91 to 50; the Pibroch Company outside Regina from 104 to 49; the Macrorie system in the central section from 185 to 74; the Viscount system near Saskatoon, from 475 to 295; and the Kerrobert system in the west-central section from 249 to 95.⁶⁷

The automobile came, particularly between 1920 and 1930, to supplement the telephone both economically and socially. Its economic advantages are obvious in a region of great distances and short seasons, where time is frequently at so great a premium. "When once seeding 'opens' everything rushes tumultuously to the last stages of threshing and marketing. In this activity accidents happen, ploughs, drills, binders, threshing outfits break and repairs must be obtained. . . . A drive of 5 to 30 miles by car is vastly

*Gertrude S. Telford, "Livingstone: A Social Survey" (Master's Thesis, McMaster University, 1931), p. 34. The \$10.50 charge has reference to the annual service rental. The average rental in 1935 on the basis of information supplied by the Department of Telephones would appear to have been about \$11 per year. Payments of debentures issued to cover cost of construction of rural telephone lines are met by tax levies on all lands adjacent to the lines regardless of whether the owners accept telephone service. See above, chap. vi, sec. 2.

⁶⁷See *Annual Reports of the Department of Telephones, Province of Saskatchewan*, 1930-8. The peak of development for the province was reached in 1930 with 71,616 rural telephones, falling off to 39,488 at the end of 1934, though it was reported at that time that there were 73 rural companies with "a total of 1737 subscribers at their last reporting, which at the end of the calendar year 1934 were not connected to any central exchange", but whose "subscribers are getting a partial service within their own circuit or group of circuits. . . . Also service is given in some districts by unorganized rural groups. The estimated total number of telephones in service of this kind is 650". In 1938, 42,151 subscribers were given with 2,530 "unorganized or otherwise not reported". Losses have not been as heavy in the northern part of the province as in the south.

different to the same distance by team and wagon.”⁶⁸ Although the first heavy snowfall usually brings motor traffic to an end until the following spring, the farm automobile has made a definite contribution to the social life of the prairies. Social intercourse between neighbours, attendance at community gatherings and public meetings, co-operative organization, visits to larger urban centres, occasional trips to a neighbouring lake are all made measurably easier, in some cases only made possible, through the automobile.⁶⁹

Through the twenties the number of automobiles (including motor-trucks) on prairie farms more than doubled. By 1930, automobiles, like telephones, were to be found on 80 to 90 per cent of all farms in the better, well-established districts. On inferior lands the proportion might fall to less than 40 per cent but for the whole prairie region the average was nearly 60 per cent.⁷⁰ While most of the automobiles were of the cheapest manufacture, large cars might often be seen in prosperous communities; in poorer communities, old and battered models of the cheaper cars did service.

With the depression, car registrations fell rapidly and by 1933 nearly half the farm automobiles of the prairie region had been taken off the roads. Automobiles were operated on from 80 to 90 per cent of all farms included in the Kindersley (1930) and Davidson (1931) surveys, and also on farms located on the greatly inferior lands of Maple Creek and Richmond in the latter year, but only 45 per cent of the farms in the good Balcarres-Indian Head and Grenfell-Wolseley districts reported automobile expenditures in 1933. Reduced operation was indicated by the sharp reduction in automobile expenditures for farms reporting cars in use.⁷¹ Naturally there have been practically no replacements or sales of new cars in any part of the region since 1930.

⁶⁸Telford, "Livingstone: A Social Survey", p. 36.

⁶⁹A recognition of the dual use of the automobile for business and social purposes is to be seen in the practice followed in farm management surveys of charging half the expense of operation to farm operating expenses and half to personal or living expenditures. The effects of the automobile on retail distribution have been noted above in chapter iii.

⁷⁰In the east-central and northern parts of the province the proportion was scarcely more than half this figure.

⁷¹See appendix. Separate registrations of farm automobiles are not recorded by the Motor License Branch of the Department of Highways. Motor licences

The service extended to a small section of the rural population by the establishment, most marked in the later twenties, of rural mail delivery routes by the postal authorities can scarcely be compared with the advantages derived from the automobile, the telephone, and the radio. The only cost to the user is the \$4.00 charged for the mail box when the route is established, the post-office authorities assuming all costs of operation. The rural mail route represents an institution taken over from older and more densely populated parts of the Dominion, and its existence on the prairies probably owes more to politicians anxious to impress their constituents than to the initiative of farm communities clamouring for the service. Under the conditions of large-scale prairie agriculture with farm-houses averaging approximately one to the mile it becomes an expensive luxury, the high cost of which far outweighs its usefulness. To serve some 1,200 boxholders from the 25 distributing offices located in the southern half of the province, mail carriers are required to travel 1,100 miles at a cost which averaged in excess of \$15 per boxholder per annum for the five years from 1930 to 1934. Since the service is free, there has been a slight increase in the number of users during the depression rather than a decrease, but in view of the essential nature of prairie agriculture, any considerable extension of the system is unlikely for some time.⁷²

issued, excluding the 8 cities of the province but including smaller urban centres and all the rural areas of the province, were as follows: 1929, 89,475; 1930, 88,325; 1931, 71,894; 1932, 57,761; 1933, 52,660; 1934, 59,310; and 1935, 60,373. The total number of farm automobiles in Saskatchewan declined from 65,094 at the census of 1931 to 54,469 at the census of 1936. During the same period the consumption of gasoline (cited by the Dominion Bureau of Statistics as one of the "indexes of prosperity") declined more rapidly in Saskatchewan than anywhere else in Canada. The decline for the province (rural and urban) between 1929 and 1933 was 54.6 per cent; for the three Prairie Provinces, 39.5 per cent; and for the Dominion, 11.4 per cent. See *The Prairie Provinces in their Relation to the National Economy of Canada: A Statistical Study of their Social and Economic Condition in the Twentieth Century* (Ottawa, 1934), pp. 108-15.

⁷²There were 1,218 boxholders in the Moose Jaw Postal District covering the southern half of the province in 1930, and 1,229 in 1935. Figures for the Saskatoon Postal District covering the northern half of the province were 3,155 for 1930 and 3,318 for 1935. The annual cost per boxholder was approximately the same for the Saskatoon District as for the Moose Jaw District. (All statistical information by interviews and correspondence with the District Directors of Postal Services, Moose Jaw and Saskatoon, July-Aug., 1935.)

5. VOLUNTARY ASSOCIATIONS

The formal provision through governmental action of an educational system for the prairie region and the growth of other institutions and services under the direction or assistance of provincial and local authorities were accompanied by the development of purely voluntary associations, all of which made important contributions to a rising standard of living. The pioneer economy was unable to support such associations entirely out of its own resources and external assistance was vital alike to maintenance and growth. Local initiative counted for much in the rise of agricultural societies and other associations which have enriched community life, though grants from federal and provincial governments were not without importance. At the same time the spirit of the agrarian frontier, the scattered population with its heterogeneous cultural background, the necessity of making provision for municipal institutions, debt and the pressure of competing demands upon any surplus income, climate and the seasonal nature of prairie agriculture (and hence of free time and leisure) have all been forces unfavourable to certain types of cultural development.

The associations which have contributed most to the social life of rural areas have been those most closely related to the problems of prairie agriculture. The service clubs and societies common to the larger urban centres are unknown in country districts though organizations of a fraternal nature gain fluctuating support and many farmers may be members of Masonic, Orange, Knights of Columbus, and Oddfellows' lodges in the nearest town or village. Nevertheless even these organizations cannot be regarded as an integral part of rural life in the same way as agricultural societies and co-operative associations.

Associations of significance in the social as well as the economic life of the rural community are the United Farmers of Canada (Saskatchewan Section) with several hundred lodges, an active women's section, and a junior branch, and the Saskatchewan Co-operative Wheat Producers with more than a thousand local units. For the last eight years financial difficulties have seriously interfered with the activities of the central office of the United Farmers though many local lodges have continued to function.

✓ The Wheat Pool maintains a staff of 13 field men, each of whom is equipped with a motion-picture machine and films which are largely

✓ of an educational nature, and over 1,200 illustrated lectures are given annually reaching upwards of 150,000 people in country districts.⁷³ Political organizations (Liberal, Conservative, Co-operative Commonwealth Federation, Social Credit, and Communist), are active in holding picnics and "rallies" in summer and, in some communities, discussion clubs and debates in winter.

The cultural associations of non-Anglo-Saxon groups on the prairies are important in many communities. One of the most representative of these associations is the German-Canadian Organization of Saskatchewan which has 40 branches and several thousand members.⁷⁴ It is a non-political association declaring its chief aims to be the stimulation of pride in Canadian citizenship (any members who are not naturalized are urged to take this step at the earliest opportunity) and the retention of all that is best in Germanic culture. Toward this latter end the preservation of the German language and the appreciation of national music are emphasized through concerts, plays, German films, and the provision of funds for instruction in the German language for school children at the end of the regular school day. In addition to this provincial organization, there is the *Deutscher Bund* of Canada, said to have similar aims, with several branches in the province, the powerful *Katholischer Volksverein* of the German Catholics, and corresponding societies among the German Lutherans. All these German associations together with the Mennonite societies are brought together in the German-Canadian United League of Saskatchewan, the council of which is composed of two delegates from each organization, and through this central body an annual reunion

✓ ⁷³More than 80,000 Saskatchewan wheat growers are members of the Wheat Pool. The United Farmers of Canada (Saskatchewan Section) had a paid-up membership of 30,000 in 1929 but there has been a sharp decline since that time. On economic and other aspects of these organizations see L. A. Wood, *A History of Farmers' Movements in Canada* (Toronto, 1924); W. A. Mackintosh, *Agricultural Co-operation in Western Canada* (Kingston and Toronto, 1924); W. P. Davisson, *Pooling Wheat in Canada* (Ottawa, 1927); H. S. Patton, *Grain Growers' Co-operation in Western Canada* (Cambridge, 1928); *Co-operative Achievements of Canadian Grain Growers* (Winnipeg, 1929); and "The Canadian Wheat Pool in Prosperity and Depression" (*Economics, Sociology and the Modern World: Essays in Honor of T. N. Carver*, Cambridge, 1935); Hugh Boyd, *New Breaking: An Outline of Co-operation among the Farmers of Western Canada* (Toronto, 1938). On the work of the Agricultural Societies see above, pp. 115-21.

⁷⁴The Icelandic, Norwegian, French-Canadian, and other ethnic groups have similar organizations. In the east-central section of the province the Ukrainian Institutes have a large membership.

of the German-Canadians in the province is held alternately at Saskatoon or Regina. The fact that these diverse organizations can co-operate so successfully through a central body distinguishes the German group from most of the other racial groups on the prairies, although the possible effects of continued or intensified Nazi propaganda on the various Germanic groups with their necessarily divergent attitudes on Nazi policy invite speculation.

Social organizations, smaller and less formal than any of those already described, frequently centre on the rural school. Concerts, plays, dances, debates, whist drives, and bridge tournaments may be held twice a month or even weekly through the long winter. Since the cost is negligible, it being customary for each girl or woman to contribute a cake or a box of sandwiches toward the refreshments while an admission charge as low as 5 or 10 cents per male is levied to cover any prizes and such incidentals as coffee and sugar, there has been an increase in the number of these social gatherings during the depression years. In summer the younger population of both sexes organize softball, baseball, or football teams. In most districts the school Christmas concert and tree, and the school picnic and sports day, are well-rooted institutions of the local community.⁷⁵

Many districts within easy access of a larger town or city tend to rely upon the urban centre for their recreation rather than upon their own efforts. In all cases the extent to which the farmer and his wife and family take part in the church and social activities of smaller urban centres is a matter of individual initiative. In such districts, however, social life is likely to be unstable, a line of demarcation frequently being noticeable between those associated with the urban activities and those whose interests are centred in

⁷⁵Nevertheless some rural communities have little or no social organization of any kind: "As one looks out over Livingstone one is appalled at the lack of social centres. Livingstone has no lake within reaching distance for summer recreation and no central picnic ground of any sort for public meetings or for social gatherings. The school district is the normal unit but in the majority of these there is nothing approximating organized social life. Groups of young people in Malonech and Maybridge have dances . . . there is not one organization for boys or girls, young people or adults except the small group of Ukrainians near Thunder Hill" (Gertrude S. Telford, "Livingstone: A Social Survey", Master's Thesis, McMaster University, 1932, p. 45). On the school as a community centre in non-Anglo-Saxon communities in Saskatchewan, see Robert England, *The Central European Immigrant in Canada*, chap. vi. See also C. A. Dawson, *Group Settlement: Ethnic Communities in Western Canada* pp. 318-32.

the local rural community. In the small towns and villages recreational facilities, apart perhaps from an occasional Chautauqua programme, are no greater than in the rural districts since generally only the larger towns support a motion-picture theatre and provide such attractions as a music or a dramatic festival. The travelling Chautauqua with their musical, dramatic, and lecture programmes of from two to five days given in the smaller centres have reached the greater part of the rural population at one time or another, but since the type and quality of programme vary directly with the amount of funds available (as evidenced in the financial pledges given by local guarantors) the depression has seriously hampered if not destroyed the Chautauqua movement. With the increased use of the automobile, attendance at motion-picture theatres increased in the late twenties, though the per capita expenditure on this form of entertainment remained much lower than for any other province with the exception of Prince Edward Island and was halved by the depression. The relative unimportance of the motion-picture theatre in the lives of the rural population is indicated by the box-office receipts for Saskatchewan, nearly 60 per cent of which have come from the three largest cities in recent years.⁷⁶

6. RELIGIOUS ORGANIZATION

Religious organizations in the early period of settlement were largely dependent on Eastern Canada, Great Britain, and the United States for personnel and funds. Although all churches in poorer districts, and numerically weak religious organizations everywhere, continued to lean heavily on outside sources for support, in many communities successful economic expansion provided the basis for financial independence and progressive development of the stronger churches until the depression brought sharp reverses.

The United Church is pre-eminently the rural church of the wheat belt. Nearly 40 per cent of the population of the rural municipalities, villages, and small towns reported adherence to it

⁷⁶See *Motion Picture Theatres in Canada, 1937* (Ottawa, 1938), for statistics covering the eight years 1930-7 inclusive. The per capita expenditure on motion-picture entertainment (exclusive of amusement taxes) for each province in 1937 was: Prince Edward Island, \$1.23; Nova Scotia, \$2.41; New Brunswick, \$1.86; Quebec, \$2.15; Ontario, \$3.90; Manitoba, \$3.07; Saskatchewan, \$1.48; Alberta, \$2.44; British Columbia, \$4.82; and the Dominion average, \$2.93.

in 1931 as against 22 per cent for the Roman Catholic, 15 per cent for the Lutheran, and 12 per cent for the Church of England.⁷⁷ Church union was determined by economics rather than by creed and the practical needs of a new country were reflected in the activities of the new church. The emphasis upon the social and cultural aspects of religious organization, as opposed to the more strictly spiritual and speculative problems of theology and doctrine, which has been a characteristic feature of the Protestant churches in Canada, continues to be most marked in the United Church.⁷⁸ It is precisely these qualities of adaptability which account for its strength in Western Canada where in many rural districts, incapable of supporting more than one church, it has supplied a community centre and recruited adherents from numerous other Protestant denominations and a score of different nationalities.⁷⁹

⁷⁷See *Seventh Census of Canada, 1931, II: Population* (Ottawa, 1933), tables 41 and 42. For the entire province (rural and urban) the leading denominations were: United Church, 26.5 per cent; Roman Catholic, 25 per cent; Anglican, 14 per cent; Lutheran, 12.5 per cent; Presbyterian, 7 per cent; Mennonite, 3.5 per cent; Greek Orthodox, 3.5 per cent; and Baptist, 2 per cent. The census of 1931 does not distinguish between the Roman Catholic and Greek Catholic Churches which are two distinct religious bodies. The latter church has a large following among the Ukrainians and other Slavonic groups in the east-central part of the province. See C. H. Young, *The Ukrainian Canadians: A Study in Assimilation*, chap. vi.

⁷⁸"The United Church was partly constructed out of national idealism, the desire to achieve a distinctly Canadian Church capable of meeting better the peculiar needs of the country. . . . Canadian Protestantism particularly as represented by the United Church, is even more than the Protestantism of the United States concerned with a sociological as distinct from a religious effort for betterment. Theological doctrine is less important than social effort. What is popularly known as 'uplift' is the driving impulse. . . and 'uplift' can best be promoted by strong organizations. . . . The spiritual is consciously made a handmaid to material achievement; and such religion may be expected in a community where the march of material life engages the major energies of men, and where idealism seldom gets further than the immediately practical. . . . The Church, in brief, undertakes to be a centre of education, recreation, and moral culture. It is the outstanding agency of sociability, whether in the country, the small town or the large city, and as such it plays a subtle and important part in the formation of public opinion and the creation of community consciousness" (Alexander Brady, *Canada*, Toronto, 1932, pp. 129-31).

⁷⁹See *Seventh Census of Canada, 1931. Bulletin no. XXXV: Religious Denominations by Racial Origins* (Ottawa, 1933), table I. In addition to more than 40 per cent of the English and 50 per cent of the Irish and Scottish, 22 per cent of the Danish and Dutch and more than 10 per cent of the German, Swedish, Norwegian, and Icelandic racial groups belonged to the United Church.

Of the other Protestant churches, the Church of England, though strong in the larger urban centres, yields second place to the Lutheran Church in the country districts. Lacking the flexibility of the United Church, the Church of England has remained essentially an English institution, maintaining definitely English traditions and a close relationship with England.⁸⁰ The Lutheran Church, on the other hand, less formal and moulded to the needs and conditions of a new environment by long experience in the American middle west,⁸¹ draws strong support from German and Scandinavian groups in the rural community and is closer to the United Church in spirit and organization.

The correlation between racial origin and religion so clearly observable in the case of the Scandinavian ethnic groups and the Lutheran Church is only slightly less obvious with respect to the French and German groups and the Roman Catholic Church although, like the United Church, the Roman Catholic Church draws a measure of support from every national group.⁸²

The Protestant and Catholic Churches alike engage in a wide range of social, educational, and welfare work. In addition to the various women's and young people's societies with their numerous activities, each church maintains a junior college or colleges⁸³ recognized by, and the Anglican, Lutheran, and United Churches' theological colleges affiliated with, the provincial university; the

⁸⁰"Indeed of all denominations the Anglican is least assimilable to the Protestantism of North America. An apostolic ministry, ancient creeds and sacraments and emphasis on ceremonial, set it apart from other Protestant communions. Its relationship to the Mother Church of England has profound influence on its character. It drinks deep in the wells of Anglican tradition, and through regular association of its leaders with the divines of Great Britain preserves the values of an ancient Church" (Brady, *Canada*, p. 133).

⁸¹The different German, Norwegian, and Swedish branches of the Lutheran Church in Saskatchewan still derive considerable support from parent organizations in the United States. See A. Fricke, *Geschichtlicher Ueberblick des Zwanzigjährigen Bestehens des Canada Districts der Evangelisch-Lutherischen Synode von Ohio und Anderen Staaten* (Regina, 1928).

⁸²See *Seventh Census of Canada, 1931. Bulletin no. XXXV*, table I. See also Dawson, *Group Settlement: Ethnic Communities in Western Canada*, chaps. iv and v.

⁸³Including English Catholic, German Catholic, German Lutheran, and Norwegian Lutheran institutions. Regina College, a United Church institution and the largest of the junior colleges, became a part of the university in 1934. See above, p. 114.

Catholic and United Churches operate hospitals;⁸⁴ and the Catholic and Lutheran, homes for the aged. Since 1930 all have played an active part in the provision of rural relief in afflicted areas.⁸⁵

In 1928 the United Church maintained 285 fields (187 married ordained ministers, 10 single ordained ministers, 22 lay supplies, 65 students, and 1 vacant) in southern Saskatchewan of which 141 were fully self-supporting. Frequently a resident minister in a small town or village held weekly, or perhaps only fortnightly or monthly services, in the rural schoolhouses of a number of districts within driving distance. Student fields were usually open only during the summer months though week-end visits might be made during the winter to those that could be reached from the theological college in Saskatoon. Depression brought sharply reduced revenues and greater demands upon the church. By 1933 it had been found necessary to merge or close 68 fields; the number of ministers had been reduced from 197 to 164; the number of self-supporting fields had declined (including 5 cities) from 141 to 50; while salaries had been slashed in both self-supporting and supported fields, the minimum being cut from \$1,725 to \$1,150 for married ordained men with lesser amounts for lay supplies.⁸⁶

⁸⁴See above, chap. vi, sec. 4. Nine of the fourteen Roman Catholic hospitals and the four United Church hospitals were outside the cities.

⁸⁵See reports of the special committee on Western relief included in *Reports of the Council for Social Service of the Church of England in Canada, 1932, 1933, 1934, and 1935* (Toronto). The Rev. Dr. George Dorey, Superintendent of Missions of the United Church for Southern Saskatchewan, has acted as secretary of the Saskatchewan Voluntary Rural Relief Committee.

⁸⁶An analysis of salaries for 1928 and 1933 in the self-supporting fields of the 11 presbyteries of the south follows:

	1928	1933
Below \$1,000.....	..	3
\$1,001 to \$1,100.....	1	2
\$1,101 " \$1,200.....	..	9
\$1,201 " \$1,300.....	1	8
\$1,301 " \$1,400.....	1	1
\$1,401 " \$1,500.....	1	9
\$1,501 " \$1,600.....	3	2
\$1,601 " \$1,700.....	4	4
\$1,701 " \$1,800.....	44	1
Over \$1,800.....	86	11
Total.....	141	50

Of the 11 ministers receiving more than \$1,800 in 1933, 8 were in the cities and the remaining 3 in large towns. In the 7 northern presbyteries the number of ministers was reduced from 123 in 1928 to 114 in 1933 and the number of students

The Church of England maintaining its organization for a much smaller following scattered over a similar area has found the burdens of the depression even heavier. The average salary of 50 Anglican clergymen in rural districts of the Diocese of Qu'Appelle, which occupies the southern part of the province, was \$666 per annum in 1935. Nine received \$70 a month; 6, \$60 a month; 11, \$50; 16, \$40; and 8 only \$30 a month. There were 13 married ordained men with an average salary of \$40 a month, and prospects of raising the minimum salary for 1936 to \$60 a month by special appeals for funds through the Missionary Society appeared extremely remote.⁸⁷ The tendency to concentration noticeable in the German and Scandinavian ethnic groups has perhaps enabled the different branches of the Lutheran Church to make less painful adjustments in meeting depression conditions. However, salaries have shown reductions similar to those of the United Church and there has been an increased reliance on the financial support extended from home mission treasuries in the United States.⁸⁸

With the French-Canadian community of Gravelbourg in the from 62 to 53, despite the increase in population resulting from migration from the dried-out areas. In 1931 the amount spent on home mission work in the 3 presbyteries covering the northern fringe of settlement was only two-thirds of that spent before the migration had begun. Salary schedules have been uniform throughout the province. Information by interview and correspondence from the Rev. Dr. George Dorey, Regina, and the Rev. Dr. J. L. Nichol, Saskatoon, Superintendents of Missions of the United Church of Canada for Southern and Northern Saskatchewan respectively, July, 1935.

⁸⁷See press report of annual meeting of the Toronto Synod of the Church of England (*Mail and Empire*, Toronto, May 14, 1936). One clergyman from the diocese of Qu'Appelle reported: "W.'s [a neighbouring missionary] average per month after paying all travelling expense last year was about \$32. My average in what is considered the best missionary parish in the diocese last year was \$40 a month. W. has a wife and two children, so have I."

⁸⁸Based on information by interview and correspondence from the Rev. H. Schmidt, Registrar of Luther College, Regina, and editor of *Lutherisches Gemeindeblatt*, published by the Canadian District of the American Lutheran Church, Aug., 1935. This German-speaking branch of the Lutheran Church had 44 ordained ministers serving 124 congregations in Saskatchewan of which only five were in the four largest cities. In addition to support from the home mission treasury for non-self-supporting parishes, several thousands of dollars have been raised each year since 1930 in the United States to assist normally self-sustaining congregations in the dried-out areas, and approximately 80 per cent of the funds required for the operation of the church college have also come from the United States.

heart of the drought area and problems of organization arising out of a scattered distribution of adherents, the Roman Catholic dioceses of southern Saskatchewan have been hard pressed. Largely self-supporting in 1928 there has been a reluctance, at least in certain dioceses, to seek assistance from outside the province and probably most of the priests serving rural parishes have fared as badly as the Anglican clergy.⁸⁹

7. LEISURE TIME

On the agrarian frontier of a generation ago the physical strain, the mental isolation, and the cultural drabness of prairie farm life were accepted as part of the price of swift economic success. But depression and drought have swept away material compensations, accentuated the inadequacies of environment, and completed the process of disillusionment.⁹⁰ An observer has described the

⁸⁹Based on information by interview and correspondence from Father D. J. Mulcahey for the Catholic diocese of Saskatoon, July, 1935. This diocese including the city of Saskatoon and part of its rural territory had not been seriously afflicted by drought, yet Father Mulcahey was of the opinion that about 40 per cent of the priests in the diocese were getting only a "bare living" and that a further 30 per cent had taken salary reductions of approximately one-third from the 1928 level.

⁹⁰"There's no music, no books, no contact with a cultured, leisured world. One can't even window-shop. Dirty, tawdry little village stores—and even they are miles away. There's only an aching, bewildered body whose strength wanes and waxes and wanes again. Above all, beyond all, there's the loneliness. It's an ever-present, all-pervading thing that both agonizes and numbs the soul. Or have farm women souls? Gorgeous sunrises flare and flame, painting the eastern sky till it glows, reflected, in the west. We glance at it dumbly as we stumble out. It means the beginning of—another day. Sunsets! Nowhere in the world such a conflagration as this; there's every color of the wide earth glowing there; but we must hurry, for all the day's work is not yet done. And its beauty mocks our squalor. I won't tell you about the harvest—about the threshing. What are mere words? And you wouldn't believe me. Then there's debt—for the land, for the machinery, for groceries. It's present in the lives of nearly all in one shape or another. Payments that must be met. There's sickness and crop failures" ("Prairie Wife—by One of Them", *Chatelaine*, May, 1935, pp. 29-33). For a vigorous discussion of the views advanced in this article, see letters of support and criticism published in the June and August issues of *Chatelaine*. See also Sinclair Ross, "A Field of Wheat" (*Queen's Quarterly*, vol. XLII, spring, 1935, pp. 31-42); Wilfrid Eggleston, *The High Plains* (Toronto, 1938); F. P. Grove, *Our Daily Bread* (Toronto, 1928), *The Yoke of Life* (Toronto, 1930), *Fruits of the Earth* (Toronto, 1933); Martha Ostenso, *Wild Geese* (New York, 1925), *The Dark Dawn* (New York, 1926); Harold Baldwin, *Pelicans in the Sky*

absence of the amenities of life, the lack of leisure, the spirit of hopelessness arising out of economic insecurity:

One who has lived and worked among the rural population for many years can see this growing sense of desolation and hopelessness reflected in every circumstance of life—the homes growing less beautiful, the social life dwindling, the Church becoming anaemic. . . . The luxuries of life, art, amusement and leisure make little contribution to the lives of the people. . . . "Art" as it is generally understood is non-existent, among our people of Livingstone. No pictures, no music except the weird half-Oriental chants of the Doukhobors and the old world songs of the Ukrainians, no wood carving, no clay modelling. . . . There is a great and appalling lack of beauty in the lives of these people. . . . Hard work and lack of money are crushing the soul out of Livingstone. For instance, how could there be any great knowledge of music in a district where 122 homes of English-speaking folk possess four pianos, perhaps twice as many organs and six radios; in a district where no music teacher is available and where good concerts are never heard?⁹¹

In good times or bad the shortness of the growing season allows the wheat farmer and his family little leisure during the summer months. "Spring comes and an eighteen-hour day is not long enough." After seeding operations, which usually take up the time from the opening weeks of April until toward the end of May, there is the heavy and important labour of summerfallowing, that is, of the preparation by ploughing and intensive cultivation of land for crop the following year. Other work, such as the repairing, together with any new construction, of buildings and fences, the cultivation of gardens, small fruits and special crops, haying, etc., also make claims upon available time during the summer months until by the middle of August harvest operations bring a pressure from which there is little relief until "freeze-up" (i.e., the freezing

(London, 1934), *A Farm for Two Pounds; Being the Odyssey of an Emigrant* (London, 1935); A. G. Street, *Farmer's Glory* (London, 1932), part II. Prairie Settlement in the Western United States has produced an extensive realistic literature. See particularly Vardis Fisher, *Toilers of the Hills* (Boston, 1928); O. E. Rølvaag, *Giants in the Earth: A Saga of the Prairie* (New York, 1929), and *Peder Victorious* (New York, 1931); Hamlin Garland, *Main Travelled Roads* (New York, 1891), *Prairie Songs* (Cambridge, 1903), *A Son of the Middle Border* (New York, 1917); and W. P. Webb, *The Great Plains* (Boston and New York, 1931), pp. 470-84.

⁹¹Telford, "Livingstone: A Social Survey", pp. 47, 59-60. Mrs. Telford emphasizes one notable exception in the handicraft work of many non-English-speaking groups. See also Robert England, *The Colonization of Western Canada* (London, 1935), chaps. ix-xvi; and W. C. Murray, "Continental Europeans in Western Canada" (*Queen's Quarterly*, vol. XXXVIII, winter, 1931, pp. 63-75).

of the soil) generally in late October, makes further land work impossible. This schedule permits little relaxation of any kind; the long work-day leaves practically no "evening" for the members of the farm family; such holidays as Victoria Day, Dominion Day, and Labour Day pass by unheeded unless there is a picnic, sports day, or exhibition in the neighbourhood sponsored by a community organization, and, since schools are closed the services of the older children will probably be requisitioned in field or garden; Sunday is, in most cases, a day of rest. Over the greater part of the wheat belt freshwater lakes are extremely rare so that escape for an occasional half-day to a beach is open only to a small number of farm families.⁹² The number of farmers who were accustomed to take a vacation of a week or two in the summer months was very small even in the pre-depression years, not always so much because of expense perhaps as the difficulty of sparing time from work. Probably the nearest approach to a holiday of any sort (and by no means repeated each year) was a short visit to Regina or Saskatoon during the week of the annual exhibition.

For the prairie farmer the winter brings a long period of enforced and relative inactivity, since the care of farm animals, the cleaning and chemical treatment of seed wheat, the repairing of harness and implements will take up but a small part of the time. Through the more prosperous years of the war and of the late twenties, a number of farmers in a few particularly well-favoured wheat-growing districts of the Regina and Rosetown plains were able to go to British Columbia or even California for the winters. Two or three farmers in each of a fair number of other districts may have been able once or twice in twenty years to escape in this way the monoto-

"A striking paradox . . . is the present disparity in the standards of living as between urban and rural citizens. The standard of living on many farms of the prairie provinces is . . . lower in many respects than that of the peasantry of Europe. The latter at least enjoy a community life, social intercourse, the aesthetic advantages of trees, streams, lakes and natural or artificial beauty in many forms. These, for the most part are denied . . . a scattered rural population, not dense enough to sustain an interesting community life. Lack of good drinking water is a hardship; lack of sufficient water for stock, in many areas, compels the farmer to concentrate on cereal crops. A sparse population makes it economically difficult to provide electric energy, water, rural mail delivery, playgrounds, community halls and other amenities or services, common to denser rural populations, and of course to urban communities" (T. C. Main, "Water Conservation in the Prairie Provinces", *Engineering Journal*, vol. XVIII, April, 1935, p. 214).

ny of farm life in the winter, but it is equally certain that there are scores of districts in which no one has ever had the funds for such a holiday. No statistics are available but probably the majority of farmers across the wheat belt have never been outside of Saskatchewan—or in any event the Prairie Provinces—since their arrival as settlers, though thousands having left behind most of their relatives in the British Isles or Germany or Scandinavia have hoped year after year to visit them “next year” yet have never been able to translate their dreams into reality. But the Californian myth, like all myths, dies hard.⁹³

The poor distribution of leisure time, an intensive preoccupation with the exploitation of new agricultural land, differences in cultural values, and the struggle to achieve a measure of economic stability as the basis of support for the rural framework, all help to explain the barrenness of cultural life on the prairies. In 1935 the Director of University Extension wrote:

There are at present many services, although they are by no means adequate, which deal with the practical problems of the farm and the farm home but there is great need on the other hand for attention to the articulate demands for cultural advancement. Dramatics, art, music, reading, debating, public speaking, public discussion, etc., while now receiving some little attention are in the main open fields, awaiting development. keen interest is being displayed by many communities in these matters but co-ordination, encouragement and guidance are needed. Had the depression not intervened much more would have been done but greatly reduced appropriations stifled any opportunity for enlargement.⁹⁴

The deficiencies have perhaps been illustrated by the review of rural library facilities, almost the only field in which there has been a slight though measurable advance.

Ninety-seven per cent of the rural population of the wheat belt 10 years of age and over could read and write at the time of the census of 1931⁹⁵ and this high degree of literacy is reflected in a

⁹³See André Siegfried, *Canada* (London, 1937), p. 154.

⁹⁴J. G. Rayner, “A Survey of Adult Education in Saskatchewan, 1935” (Saskatoon, University of Saskatchewan, 1935, type-written), p. 2. In 1938 the University received a small grant for adult education from the Carnegie Corporation which made it possible to organize a service by mail of courses and information for study and discussion groups.

⁹⁵See *Seventh Census of Canada, 1931. Vol. IV: Cross-Classification* (Ottawa, 1934), table 65. The provincial figure for the entire rural population is lowered to 94.25 per cent by the inclusion of the east-central section of the province as illiteracy ranges from 22 to 27 per cent among the rural population 10 years of age and over born in South, Eastern, and Central European countries (table 74).

wide circulation of weekly farm newspapers and of farm journals, seven of which reported a combined circulation of 336,000 in 1935 or an average of 2.4 for each of the farm homes of the province.⁹⁶ The leading weekly farm newspapers are the *Western Producer*, published at Saskatoon and the official organ of the Saskatchewan Section of the United Farmers of Canada, the Saskatchewan Wheat Pool, and other co-operative organizations; and the *Free Press Prairie Farmer*, published at Winnipeg. Farm journals have declined in numbers, frequency of publication, and importance as the depression has forced amalgamations. The *Country Guide and Nor'-West Farmer*, published monthly at Winnipeg, has a wide circulation. Weekly newspapers printed in foreign languages, such as *Der Nordwesten* published in Winnipeg, secure many thousands of subscribers in rural Saskatchewan. The leading dailies of the area, the *Regina Leader-Post*, *Saskatoon Star-Phoenix*, and *Winnipeg Free Press* have a comparatively small body of farmer subscribers, partly as a result of infrequent mail service, but before the depression a fairly wide range of non-agricultural journals and women's magazines were taken. Books have always been much more rare.

8. "ADVANCEMENT" GOODS AND NON-ESSENTIALS

The contribution to the social life of farm families made by many farm facilities is similar to the contribution made by a wide range of expenditures which do not lend themselves to convenient or accurate classification but which are sometimes termed "advancement" goods.⁹⁷ Definite responsibility for moral judgments in doubtful cases of personal, luxury, or semi-luxury expenditures may be avoided by coupling "non-essentials" with "advancement" goods. Education and health, religion and recreation have each been considered important enough to warrant separate and detailed treatment. Expenditures for religious and charitable purposes tend to show rather less flexibility than most other items in this general group since they represent institutions which a community will make every effort to maintain when hard times

⁹⁶Rayner, "A Survey of Adult Education in Saskatchewan, 1935", p. 1.

⁹⁷"That portion of family living expenditure devoted to educational costs, expenditures for recreation, and general social participation has been designated as expenditure for advancement goods" (Dawson, *The Settlement of the Peace River Country*, p. 148). See also Dawson, *Group Settlement: Ethnic Communities in Western Canada*; and Kirkpatrick, *The Farmers' Standard of Living*.

come, though the measure of support extended at any given time will vary greatly from district to district depending on race and religion as well as upon economic factors. At Kindersley in 1930, 87 per cent of the farm population contributed an average of \$37 for each farm contributing; at Davidson in 1931 contributions averaged \$24 from 80 per cent which corresponded closely with the showing made by Richmond and Maple Creek in the same year. At Scott on the Regina plains in 1932 contributions averaged \$35 per farm reporting, but only 55 per cent reported any expenditure. This corresponded to the proportion reporting contributions at Balcarres-Indian Head and Grenfell-Wolseley in 1933, though the average contribution was less than \$18; on the other hand, though the relative sacrifice was much greater, the German-Austrian population of Neudorf-Lemberg in 1933 supported the Catholic church well, 83 per cent of the farms reporting contributions averaging \$21.⁹⁸ Ordinarily as the marginal lands are approached both the proportion contributing and the average contribution tend to fall away rapidly.

Since the greater part of both elementary and secondary education is financed through taxation, the item of education figures in the farm budget largely in the form of outlays for school-books and supplies, music lessons, correspondence courses, and for maintaining children away from home at a high school or university. Thus wide variations between farms and between districts are to be expected. At Kindersley in 1930, 95 per cent of the farms reported educational expenditures averaging \$47 for each farm reporting; at Davidson in 1931, not quite 60 per cent of the farms reported any expenditures though the average for farms reporting was \$66. The proportion of farms reporting was slightly higher at Scott in 1932, but the average expenditure for farms with the item was only \$23; for comparable proportions at Balcarres-Indian Head and Grenfell-Wolseley in 1933, expenditures averaged about \$29. Contraction of educational expenditures during depression may be less pronounced in poorer than in better districts since economic conditions never permitted much expansion of this item.

Expenditures for personal, social, and recreational purposes may be compressed more readily under the impact of adversity than most other types of living expenditures. Vacations, trips to the

⁹⁸For details of religious and charitable, educational, personal, and social expenditures in districts covered by the farm management surveys, see appendix.

city, outlays on books and periodicals, on entertainments and amusements, on tobacco, on liquor,⁹⁹ on luxuries and semi-luxuries, etc., can be either deferred or sharply reduced. However, expenditures for these purposes differ from religious and educational outlays in that the proportion of farm families having no expenditure of a personal or social character is likely to be negligible except under conditions of the most extreme poverty. At Kindersley in 1930, the average expenditure for all farms was \$106; on the poorer soils of Richmond and Maple Creek in 1931 the average was over \$82; and at Davidson in the same year with a poor crop, \$67. At Scott in 1932 following a crop failure, personal and social expenditure averaged only \$37 and at Balcarres-Indian Head in the following year, \$39. Averages for Wellington and Brokenshell in 1932 and Grenfell-Wolseley and Neudorf-Lemberg in 1933 were lower, being about \$26 per farm for each district.

9. THE VOLUME OF WHOLESALE AND RETAIL TRADE

Low agricultural revenues in Saskatchewan have been reflected in sharp declines in all sales, and while it is impossible to separate rural and urban transactions, it is possible to give a rough quantitative measurement of the impact of the depression on the province as a whole. The value of retail trade fell off from \$189,000,000 in 1930 to \$103,000,000 in 1933, a decline of more than 45 per cent which, as shown in table XL, was greater than experienced in any other province. Similarly the upswing in the value of retail trade, which became evident in 1934 and succeeding years has been less pronounced than in any other part of the Dominion.

An analysis of the distribution of the decreasing value of total retail sales in Saskatchewan (table XLI) shows wide variations between the different business groups. In 1934 the Dominion Bureau of Statistics, after pointing out the close relationship exist-

⁹⁹Between 1930 and 1932 the Saskatchewan Government Liquor Board found it necessary to close approximately one-half of all beer stores of the prairie area as "depressed economic conditions reflected themselves acutely in the sales of beer". Regional figures are not available but the number of stores open in the province fell from 182 to 122. Receipts from the sale of beer in towns and villages fell off by two-thirds between 1929 and 1934 (from \$4,262,329.44 to \$1,422,985.05), and Liquor Store Sales by three-quarters (from \$3,339,260.90 to \$840,556.55), in the same period. Information from N. B. Williams, Chairman, Saskatchewan Liquor Board, Regina, Aug., 1935. See also *Annual Reports of the Liquor Board, Saskatchewan*, 1930-8.

TABLE XL
RETAIL MERCHANDISE TRADE IN CANADA AND THE PROVINCES, 1930-7*

	TOTAL NET SALES	INDEX OF RETAIL SALES (1930 = 100.0)									
	1930	1930	1931	1932	1933	1934	1935	1936	1937		
CANADA, Total†	\$2,755,569,900	100.0	82.2	69.8	64.8	71.1	74.6	80.1	89.0		
Prince Edward Island	13,773,700	100.0	83.8	67.4	64.7	70.3	71.9	82.4	85.3		
Nova Scotia	99,519,900	100.0	90.3	75.1	69.2	77.2	81.6	88.7	99.8		
New Brunswick	84,371,900	100.0	85.0	67.6	62.1	69.1	73.1	79.4	90.9		
Quebec	651,138,500	100.0	86.4	71.5	64.9	69.0	71.3	76.5	86.9		
Ontario	1,099,990,200	100.0	86.6	71.8	67.4	74.9	78.0	83.0	92.9		
Manitoba	189,243,900	100.0	81.3	69.6	64.5	69.4	73.4	78.5	85.2		
Saskatchewan	189,181,100	100.0	70.8	59.2	54.5	59.4	63.2	69.7	68.3		
Alberta	176,537,100	100.0	76.1	65.6	61.8	69.0	74.0	78.7	86.3		
British Columbia	248,597,500	100.0	83.7	65.9	62.6	69.6	75.8	84.0	93.6		

*From *Retail Merchandise Trade in Canada, 1937* (Ottawa, 1938).

†Includes Yukon and Northwest Territories.

TABLE XLI
RETAIL MERCHANDISE TRADE IN SASKATCHEWAN, BY KINDS OF BUSINESS, 1930-7*

Kind of business	TOTAL NET SALES (thousands of dollars)	INDEX OF RETAIL SALES (1930 = 100)									
	1930	1930	1931	1932	1933	1934	1935	1936	1937		
Total, All stores.....	\$189,181	100.0	70.8	59.2	54.5	59.4	63.2	69.7	68.3		
Food group.....	25,878	100.0	79.6	65.0	59.8	60.7	63.0	66.2	68.9		
Country general stores.....	37,710	100.0	75.0	64.5	61.2	67.5	70.1	73.5	72.9		
General merchandise group.....	20,102	100.0	82.2	71.0	69.5	73.5	73.2	84.0	80.5		
Automotive group.....	27,049	100.0	60.9	45.8	41.6	53.0	63.7	80.8	83.0		
Apparel group.....	10,232	100.0	78.8	67.2	58.5	62.7	68.0	71.6	65.4		
Building materials group.....	22,612	100.0	64.0	55.6	47.7	51.9	57.7	63.4	55.1		
Furniture and household group.....	4,087	100.0	75.8	56.1	47.7	51.5	58.4	66.7	65.1		
Restaurants, cafeterias, etc.....	5,552	100.0	75.5	55.2	49.7	52.2	55.2	58.1	58.9		
Farmers' supply stores.....	4,282	100.0	56.4	51.1	43.8	47.5	51.5	57.8	64.4		
Book stores.....	423	100.0	68.7	55.3	44.2	45.4	49.1	52.7	50.6		
Coal and wood yards.....	3,678	100.0	85.1	81.2	70.2	63.9	68.7	75.3	71.9		
Drug stores.....	4,988	100.0	79.6	68.8	62.1	66.0	68.5	72.5	71.9		
Florists.....	297	100.0	85.5	65.3	54.9	55.6	62.0	64.6	65.3		
Jewellery stores.....	1,103	100.0	63.5	49.0	49.0	52.9	60.0	67.0	61.3		
Office, school, and store supplies.....	956	100.0	65.8	63.3	44.0	48.8	59.4	66.1	60.0		
Tobacco stores and stands.....	946	100.0	81.9	74.2	62.1	62.4	64.7	69.0	70.9		
Government Liquor Stores.....	9,227	100.0	62.6	51.9	52.3	56.4	46.9†	45.7†	39.8†		
Unclassified kinds of business.....	10,058	100.0	43.8	37.2	35.4	40.1	47.2	52.1	51.2		

*From *Retail Merchandise Trade in the Prairie Provinces, 1937* (Ottawa, 1938).

†The decline in Government Liquor Store sales in 1935 and subsequent years is largely accounted for by the opening of beverage rooms and the consequent diversion of trade from government stores.

ing between the changes in the volumes of wholesale and retail trade in the Prairie Provinces, drew attention to one feature which is of particular significance in view of the repeated failure of field crops and gardens over a large part of Saskatchewan:

While wholesale sales in the prairie provinces show the largest decline for any region for the period 1930 to 1933. . . there are several striking features in the trends by kinds of business. For the Dominion as a whole, the index of sales for foods is 68.9 in 1933, while in the prairie provinces it is 71.6. For groceries, the prairie index is 89.5 compared with 80.8 for the Dominion. In view of the large decrease in agricultural income in the prairie provinces, the maintenance of the sales of food products at such a high level is somewhat surprising. Two factors may have contributed toward this result. The first is a tendency toward greater purchasing through regular wholesale and retail channels during the past four years and, secondly, the considerable amounts spent by governmental agencies for relief purposes in the prairie provinces.¹⁰⁰

A number of different types of businesses showed losses in the value of trade exceeding 50 per cent between 1930 and 1933, although there was some improvement in almost every line in 1934. The greatest loss was experienced by the automotive retailers (including motor vehicle dealers, dealers in accessories, tires and batteries, filling stations, garages, etc.) where the value of sales fell off almost 60 per cent between 1930 and 1933, but the building materials group was not far behind. Of the smaller businesses, farmers supply stores and the furniture and household group (including furniture, household appliances, home furnishings, radio and music stores) were hardest hit.

In addition to variations in the values of sales between the various business groups, there has been considerable variation within the same group. In the automotive group, motor vehicle dealers fared worst, as might be expected, sales declining 63.7 per cent between 1930 and 1933, although recovery after 1933 was stronger than in any other business. In the building group, lumberyards, as might also be expected, showed the greatest loss, since between 1929 and 1933 construction in Saskatchewan declined approximately 98 per cent,¹⁰¹ and there has been but a slight renewal of building activity in subsequent years. In the furniture

¹⁰⁰*Wholesale Trade in Canada and the Provinces, 1933* (Ottawa, 1935), p. 3.

¹⁰¹*The Prairie Provinces in their Relation to the National Economy of Canada*, p. 111.

and household group, household appliance stores fared worst and recovery has been slight.

It must be remembered that while the indexes of retail sales quoted above show only the movements in the dollar volume of sales, such indexes cannot be taken, during periods of rapid price changes such as the years 1930-2, as indicating the physical volume of trade. In the absence of price indexes constructed so as to be strictly comparable, it is impossible to state definitely how much of the decrease in dollar volume of sales is due to the decline in price levels and how much to a decrease in the quantity of goods consumed. While cost-of-living indexes are not constructed in such a way as to warrant their use as a correction for price changes in the index numbers of retail trade, they suggest the order of magnitude of price trends. The Dominion Bureau of Statistics weighted retail price index (including foods, fuel, clothing, and household requirements) when adjusted to make the 1930 figure equal 100 was 85.3 for 1931; 75.1 for 1932; 72.5 for 1933; 76.2 for 1934; 76.6 for 1935; 78.4 for 1936; and 81.2 for 1937.¹⁰² Without attempting to establish any precise mathematical relationship between the Bureau's Dominion retail price index and the Saskatchewan retail sales index, but recalling that when the 1930 figure for the latter also equals 100, the 1931 figure is 70.8; 1932, 59.2; 1933, 54.5; 1934, 59.4; 1935, 63.2; 1936, 69.7; and 1937, 68.3; it seems clear that the decrease in dollar volume of sales has been much greater than the decline in the price level.

¹⁰²*Retail Merchandise Trade in Canada, 1937* (Ottawa, 1938), p. 4. "In comparing the indexes of retail sales for the period 1930 to 1936 with the Retail Price Indexes it should be remembered that figures for certain kinds of business are included in the former which are not included in the latter. In particular, automobile dealer establishments have considerable weight in determining the indexes of retail sales but commodities sold by these establishments are not included in the price indexes. It must also be remembered that the whole weighting system used in computing the Bureau's Indexes of Retail Prices is based on an estimated aggregate consumption in Canada, including a proportion which does not pass through the channels of distribution covered by the census of merchandising. The lack of a series of price indexes comparable to retail sales by kinds of business precludes any accurate correction of dollar value of retail sales for price changes. Nevertheless, the general trends in the indexes for both dollar value of sales and for retail prices indicate that during the period 1930 to 1933 the physical volume of goods distributed did not decline to anything like the extent indicated by the decrease in the value of sales. Great differences in variations in physical value, as in value of sales, may be found for different groups of commodities" (*ibid.*, 1936, p. 5).

CHAPTER VIII

REHABILITATION

A series of good crop years tempts both settlers and writers to predict cultivation in the most distant situations. A series of dry years invites equally extreme predictions of restriction of settlement. . . . An old plains farmer once remarked to me, "Annual rainfall? We have no such thing as an annual rainfall here! Once in a long while it rains."—ISAIAH BOWMAN

1. NORTHERN SETTLEMENT

With the period of prairie expansion definitely closed and the better sections of the park belt already occupied, settlement in the later twenties was forced to turn to the wooded lands of the northern forest region.¹ After 1929 drought resulted in widespread abandonment of farms on inferior lands in southern and central Saskatchewan and the migration of several thousand families from these areas to the northern fringe, the greatest movement taking place in the summers of 1931 and 1932 following the complete crop failure over most of the prairie region in the former year. Table XLII shows the number of families and the estimated number of persons moving from the drought areas to Crown lands in the north for the nine years 1930-8, together with details of government land settlement entries. When allowance is made for settlers who have acquired land from private and institutional holders, the total movement from the prairies has probably been in excess of 9,000 families or 45,000 persons.²

¹See above, chap. iv, sec. 1 and 2, and figure III. See also W. A. Mackintosh, *Prairie Settlement: The Geographical Setting* (Toronto, 1934), *passim*; W. A. Mackintosh *et al.*, *Economic Problems of the Prairie Provinces* (Toronto, 1935), chaps. x and xi; R. W. Murchie *et al.*, *Agricultural Progress on the Prairie Frontier* (Toronto, 1936), chaps. ii and xiv; A. S. Morton and Chester Martin, *History of Prairie Settlement and "Dominion Lands" Policy* (Toronto, 1938), *passim*; Robert England, *The Colonization of Western Canada* (London, 1936), chaps. v and vi; *The Prairie Provinces in their Relation to the National Economy of Canada: A Statistical Study of their Social and Economic Condition in the Twentieth Century* (Ottawa, 1934), pp. 1-22.

²See evidence of the Hon. R. J. M. Parker, Minister of Municipal Affairs, *Report of Proceedings of the Royal Commission on Dominion-Provincial Relations, 1937* (Regina, Dec. 10, 1937), p. 1370. The re-establishment plans of the Commissioner of the Northern Settlers' Re-establishment Branch of the Depart-

TABLE XLII

MOVEMENT OF FARM POPULATION FROM DROUGHT AREAS TO NORTHERN CROWN LANDS IN SASKATCHEWAN, 1930-8*

Year	POPULATION MOVEMENT		SETTLEMENT ENTRIES†	
	Families	Persons	Number	Acres
1930.....	318	1,641	369	59,040
1931.....	2,792	17,082	3,626	580,160
1932.....	1,471	8,330	1,711	273,760
1933.....	848	3,369	1,060	169,600
1934.....	420	1,890	855	119,400
1935.....	410	1,840	562	89,920
1936.....	280	1,400	491	78,560
1937.....	53	237	454	71,052
1938.....	37	148	448	71,680
	6,629	35,937	9,576	1,513,172

*Information from Department of Natural Resources, Regina.

†An undetermined but small number of entries in each year were for lands in other parts of the province; 543 of the 562 dispositions in 1935 and all dispositions in subsequent years were by homestead entry; these entries are exclusive of 367 reservations covering 58,720 acres made on behalf of settlers re-established under the programme of the Department of Municipal Affairs in 1937 and 1938.

✱ Upon the transfer of the natural resources of Saskatchewan from the Dominion to the province on October 1, 1930, the free homestead policy of the federal government was discontinued.³ All unalienated provincial lands suitable for settlement were to be classified and disposed of by sale in parcels of 160 acres under regulations of the Department of Natural Resources.⁴ The

ment of Municipal Affairs include 7,800 families settled since January 1, 1930. Examination of preliminary material from the 1936 Census of the Prairie Provinces reveals an increase of 9,438 farms between 1931 and 1936 in the eight census divisions of Saskatchewan falling in the park and forest zones as against a decrease of 3,826 farms in six census divisions of the prairie plains.

*The *Report of the Saskatchewan Royal Commission on Immigration and Settlement, 1930* (Regina, 1930) had recommended, "that homesteading be discontinued and that the remaining Crown Lands where immediately available for agriculture be sold (a) to residents of the province, (b) to other Canadians, (c) to British settlers, (d) to other immigrants" (p. 15).

"Under Provincial Administration an early review was made of the cost of survey and administration of homestead lands, and it was estimated by

Director of Lands outlined the basis of classification as follows in 1934:

1. Valuable settlement lands, which are practically non-existent now, were considered those parcels representing a low, first grade or second grade agricultural unit—the geographical location was an important consideration in determining this classification. The upset price of valuable settlement land was established at not less than \$3.00 per acre.

2. Ordinary settlement land was the classification given to fair to poor and mostly third grade land, but deemed to be sufficiently good enough to allow a man of industry and energy who was adaptable to bush conditions a reasonable hope of making a living on it. The upset price of ordinary settlement lands was on a basis of not less than \$1.00 per acre.

3. Pasture lands were parcels considered fit for pasture or grazing purposes, only, and which would not fulfil the requirements of a self-contained farm, but could be successfully operated as an adjunct to some established units.⁴

The Provincial Land Regulations required all applicants for either valuable or ordinary settlement lands to be British subjects who had resided in the province for a period of five years immediately prior to the date of application. The terms of sale required an initial cash payment of 10 per cent of the upset price, the unpaid balance being spread over a period of twelve years with interest at 6 per cent. In addition the settler was required to clear, break, and have in cultivation an area of not less than 20 acres within three years from the date of sale, to erect a habitable dwelling of the value of at least \$60, and to reside on the land or on land in

Departmental officials that every homestead entry and disposition involved an administrative cost of from \$100 to \$200 per homestead unit. This included cost of survey, township plans and records, entry filing, homestead inspectors' inspections, general correspondence, and issuing of patent. It was felt that the general public and general revenues of the Province should not be called upon to subsidize entrants on homestead lands by bearing all the cost of administration. It was therefore decided that all lands suitable for settlement as homestead lands should be disposed of at a minimum price of \$1.00 an acre, and the necessary order-in-council amending the existing Dominion regulations was passed within a few weeks of the transfer of administration from Federal to Provincial control" (*Annual Report of the Department of Natural Resources of the Province of Saskatchewan, 1930-31*, Regina, 1931, mimeo., p. 4). See also *Statutes of Saskatchewan*, 21 Geo. V, c. 11 and c. 14, being the Department of Natural Resources Act, 1931, and the Provincial Lands Act, 1931.

⁴Correspondence, Nov., 1934. No information is available on the location of pasture land sales but scattered parcels of inferior lands in the southern part of the province probably account for the greater part of them. Pasture land sales for the five years 1931-5 inclusive numbered approximately 1,600, covering 265,000 acres.

the vicinity owned and operated by a relative for a period of not less than four months in each of the first three years of occupation.

An analysis of the first 7,000 land settlement entries indicates that less than 4 per cent were for lands classified as valuable settlement lands, only 277 parcels being reported as selling at \$3.00 an acre or more; 14 per cent of all entries were competitive sales of ordinary settlement land at from \$1.01 to \$2.99 an acre, while a full 82 per cent were at the upset price of \$160 per quarter section required for ordinary settlement land.⁶

In April, 1934, with only third-grade Crown lands still unalienated, classification of settlement land was abandoned, the requirements for entry were modified, and provision was made for credits for improvements:

A radical change in policy was, briefly, that all Provincial lands were advertised for sale without classification. Applicants for the purchase of Provincial lands could request that it be sold to them as settlement land. They were required to be prepared to swear that they had personally inspected the land and that in their opinion at least 50% of it was arable with good soil suitable when cleared for the growing of cereal crops, and with at least 30 acres of such arable land which could be cleared and brought under cultivation at a cost of not more than \$12.00 per acre. The purchaser of settlement land under these amended regulations was required to perform the same duties as under the former Provincial Regulations, except that it was necessary for him to break 15 acres only, and the period in which he was required to do it was extended from three to four years. The terms of payment were made the same with interest being charged only on overdue instalments at 5% per annum. Provision was made, however, where an allowance to the purchaser of a credit on the purchase price of settlement land amounting to one-half the cost of any breaking which he might do was available, the allowance in no case to exceed \$6.00 for each acre of breaking and no allowance to be made for any breaking in excess of 15 acres.⁷

The eligibility requirements were also amended to include all British subjects, male or female, without reference to former residence.

Following a change of government in 1934, an amendment to the Provincial Lands Act restored the policy of free homesteads to take effect June 1, 1935. The amendment also made provision for the return of all payments, except the initial 10 per cent of the purchase price, on provincial land settlement entries made under

⁶Compiled from a memorandum of the Director of Lands, Department of Natural Resources, Regina, Dec., 1934.

⁷Correspondence from the Director of Lands, Regina, Nov., 1934.

the previous regulations and released settlers from any liability for further payments,⁸ which meant that most of the settlers whose entries were made prior to June 1, 1935, paid an entry fee of \$16 on their lands while the filing fee payable on homestead applications made after that date was the traditional \$10.⁹ Other requirements concerning eligibility and settlement duties remained substantially the same as under the former administration. A total of 1,936 northern homestead entries were granted between June 1, 1935, and January 1, 1939.

→ Meanwhile, the movement of settlers from the dried-out areas, and more particularly of urban unemployed, to new lands was facilitated by government assistance in transporting stock and equipment and by government loans for settlement purposes. In 1931-2 the Saskatchewan Relief Commission arranged for the transportation at reduced rates of 1,852 carloads of settlers' effects and 878 carloads of livestock at a total cost of \$152,571.¹⁰ In 1934 the relief authorities again gave assistance by shipping 662 cars of settlers' effects from the drought areas at a cost of \$37,380, and in 1935 the number of cars moved rose to nearly 1,000 at a cost to the government of \$54,270.¹¹ In 1931 the government provided by statute that

Whereas it is desirable that the unoccupied provincial lands suitable for agriculture should be settled by Saskatchewan citizens who are experienced in, and conversant with, local methods of farming; and Whereas present economic conditions make such settlement difficult and unattractive; and Whereas it is considered advisable to afford financial assistance to qualified persons to settle upon such lands, including areas suitable for pursuits other than grain growing . . . the Lieutenant-Governor-in-Council may advance . . . amounts not to exceed \$500 in any one case, to assist in settling . . . upon unoccupied provincial lands . . . persons who have resided in Sas-

⁸See *Statutes of Saskatchewan*, 25 Geo. V, c. 17, and *Homestead Regulations under the Provincial Lands Act*, Edition no. 3 (Regina, 1935).

⁹"For the period ending April 30, 1936, . . . 5,922 settlement land sale contracts converted to homestead entries. Through the cancellation of the contracts all payments made except the initial payments were refunded or applied on indebtedness due the Province, and all or any future payments for which the purchaser was liable were cancelled" (*Annual Report of the Department of Natural Resources*, 1936, Regina, 1937, mimeo., p. 2).

¹⁰Information from the General Manager of the Saskatchewan Relief Commission, Aug., 1934, and from the Deputy Provincial Treasurer, Regina, Sept., 1935.

¹¹Information from the Deputy Minister of Agriculture, and the Deputy Provincial Treasurer, Regina.

katchewan for the five years immediately preceding the date of application, who possess livestock or other pioneer farm equipment to the value of \$250.¹²

Eight hundred and fifty-three applications for settlement loans were received in 1931-2 of which 426 were refused as not coming within the terms of the Act, while of the remainder after careful selection 249 received loans averaging approximately \$250 per family and settled on Crown lands chosen by themselves. Most of the settlers under this scheme took lands in the Loon Lake, Meadow Lake, and Good Soil areas of the north-west and, "owing to the fact that the majority originally lived in the drouth areas of the South, it was necessary to furnish sustenance to families moving in, in order that they might carry on the necessary improvements".¹³ In subsequent years the policy of the administration was to confine advances as far as possible to permanent improvements, such as construction and repair of buildings, breaking new land, fencing, etc., allowing such settlers as were not self-supporting to seek direct relief in the form of food, clothing, and medical assistance through the Relief Commission. About 40 families, settled on poor land or unable to adapt themselves to the conditions of pioneer farm life, abandoned their holdings; a few gradually became self-supporting and actually repaid their loans; the majority continued to be dependent on relief, and progress was slow so that after four years the average loan settler had less than 20 acres under cultivation and it was reported in 1935 that "a survey . . . indicated thirteen settlers were not on relief".¹⁴

Other assisted land settlement schemes were worked out in 1932 and 1934 as parts of federal relief policy under which the Dominion was to contribute one-third and the province, together with the originating municipality, two-thirds, of a sum not exceeding \$600

¹²*Statutes of Saskatchewan*, 21 Geo. V, c. 22. The rate of interest charged on loans under the Act is 6½ per cent. See also *Statutes of Saskatchewan*, 24 Geo. V (1934), c. 9, under which power is given to lend an additional \$100, for the purchase of farm equipment, to any settler having not less than 10 acres under cultivation.

¹³*Annual Report of the Department of Natural Resources for the Year ended April 30, 1932* (Regina, 1932, mimeo.), p. 5.

¹⁴*Ibid.*, 1935. Advances, exclusive of relief, amounted to \$48,146 in 1935 and land under cultivation was given as 3,800 acres. Abandonments were heaviest among settlers sent out from urban centres under "Back-to-the-Land" movements, although in all cases cities gave material assistance over and above the government loans.

for each settler, to enable families who otherwise would be in receipt of direct relief to establish themselves on the land with a view to becoming self-supporting. The Dominion contribution was considered a non-recoverable expenditure. As Saskatchewan was financially unable to join with the Dominion in furnishing settlers with the maximum sum, advances were limited to \$300 in 1932, although subsequently increased to \$600.¹⁵ About 1,000 families received assistance under the 1932 and 1934 schemes and a similar scheme of the same type worked out in 1937, at a total cost to March 31, 1938, of approximately \$450,000 to which the Dominion contributed \$152,146.¹⁶ These schemes seem to have been operated largely as "back-to-the-land" movements to ease the pressure of urban unemployment by transporting families with some former experience of farming from the cities and towns to the northern fringe.¹⁷ Abandonment has been quite heavy and a very small proportion of these relief loan settlers remaining on the land have shown any indication of becoming self-supporting.¹⁸

Government assistance in the form of loan schemes can scarcely be said to have been an important factor in northern settlement from 1930 to 1935 and even after allowance has been made for government aid in meeting the costs of transferring settlers' effects and livestock, the great majority of the farmers who fled before the drought covered the long trek to the north with their teams and wagons and made their own arrangements in securing provincial or other lands there.

Nevertheless, the provincial government has been called upon to make other and substantial contributions. The new northern settlement is scattered over an enormous area stretching from Swan

¹⁵Information by interview, Commissioner, Northern Settlers' Re-establishment, Oct., 1937.

¹⁶See *Report of the Dominion Commissioner of Unemployment Relief for the Year ending March 31, 1938* (Ottawa, 1938), pp. 9-10.

¹⁷See England, *The Colonization of Western Canada*, chap. vii. Of 501 families settled on homesteads and purchased farms in the north down to October 1, 1933, 426 families are given as coming from the cities, 58 from towns and villages, and only 17 from rural municipalities (p. 131).

¹⁸"Three Saskatoon families which went to the north country under Government land settlement schemes have returned to the city and are applying for relief. Eight others have sold their effects and will return shortly, according to information received to-day by Mayor Pinder. They are returning because they believe they will be better off on relief in Saskatoon than trying to make a living on a farm under pioneer conditions" (*Saskatoon Star-Phoenix*, Nov. 13, 1935).

Plains on the Manitoba border to Cold Lake on the Alberta border and averaging nearly 100 miles in depth,¹⁹ while the forest belt, with its heavy tree cover, its swamps and streams, has necessitated, in striking contrast with prairie settlement a generation earlier,²⁰ the immediate construction of expensive colonization roads by the provincial government.²¹ Demands for extension of government telephone lines into districts where such lines could not be expected to pay for several years have been met by allocating one-half the costs of construction to the Department of Telephones and one-half to the relief authorities.²² The impoverished new settlers have leaned heavily upon the provincial government in attempting to make rough provision for elementary education. The Deputy Minister of Education has pointed out that during the first phase of forest settlement "there was a small market for debentures and some of the districts issued debentures for the purpose of financing the building of a school. Furthermore, these first settlements have an advantage over the newer settlements in that better land was selected. The people moving in were better off financially and were able for a short time to obtain work on the prairies to earn a grub stake for the time they were required to reside on their lands."²³ Under the altered conditions of settlement in recent years the Department of Education has been called upon to make special grants for the construction of new schools:

The Department has encouraged the building of schools from native material by the co-operative effort of the ratepayers. Sometimes the ratepayers are permitted to work out a portion of their taxes. Many of these districts have been successful in building substantial log buildings without

¹⁹"Report of the Commissioner of Northern Settlers' Re-establishment to the Government of Saskatchewan" (Regina, Dec., 1935, type-written), p. 1. Roughly 40 per cent of the settlers are to be found in the Meadow Lake-Loon Lake area north of North Battleford; 40 per cent, north-east and north-west of Prince Albert; and the remaining 20 per cent in the Hudson Bay Junction area.

²⁰See above, chap. vi.

²¹See *Annual Reports of the Department of Highways, 1930-31 to 1937-38* (Regina). See also above, chap. vi, sec. 3, and particularly table xxx. In addition to recorded expenditures on colonization roads, nearly all credits allowed relief recipients for road work in 1934-5 (\$600,000), 1935-6 (\$153,000), and 1937 (\$294,203) were in new northern districts, while some expenditures on market roads and even on provincial highways should probably be charged to colonization account.

²²See *Journals of the Province of Saskatchewan, Session of 1934-35, XXXIII*, p. 159.

²³Correspondence, Oct., 1934.

creating any debt to be met from future taxation by reason of the fact that the Government has paid a special grant to provide windows, doors, finishing lumber and hardware. It has been found that a special grant of \$200.00 with the regular building grant of \$66.66 has been sufficient to provide these necessities. In the matter of equipment the Department has advised these districts to refer the question of equipment to the Inspector of Schools and purchase only the minimum requirements until such time as the ratepayers are better established. In some cases the boards of trustees have constructed seats and desks from native material at much less expense than purchasing the regular manufactured furniture. The salaries of the teachers in these districts are low but I cannot say that they are any lower than in a large number of districts in the Province. The main cash payment consists of the grant.²⁴

The contributions which the new school districts can make toward operating expenses continue to be very small.²⁵

Direct relief has constituted a steadily increasing drain upon the provincial treasury as the number of families requiring assistance has grown. Many settlers were on the relief rolls when they took up their holdings though it was hoped that they would gradually become self-supporting as they cleared their land and utilized the natural resources of the country, such as wood for building, fuel for sale, and wild fruit and game for food.²⁶ Other settlers, self-supporting at first, found it necessary to seek relief as their slender resources became exhausted, as their prairie-bred horses died of swamp fever, and as their small crops were destroyed or

²⁴*Ibid.* "The number of new districts established in new homestead country in the five years 1930-34 inclusive was 154 and the school enrolment in these districts is reported as being 4,801, or an average of over 30 per school. These figures give some idea of the extent of settlement which has taken place in recent years in the newer portions of Saskatchewan" (*Annual Report of the Department of Education, 1934*, Regina, 1936, p. 32). A further 56 new districts were established in the years 1935, 1936, and 1937. See *ibid.*, 1937, p. 23.

²⁵An inspector of schools reported as follows at the end of 1935: "The struggle to keep schools in operation in this inspectorate has been greater this year than during any of the previous depression years. The reason is that many people in the north are recent settlers, as yet only weakly established and, therefore, dependent entirely on the returns of their present crop which this year was definitely poor and, in many parts frozen. I am pleased to report that no school was closed through lack of funds, although in many cases the thanks for this are due to the heroism and self-sacrifice of the teacher" (*ibid.*, 1935, p. 48).

²⁶A number of different settlers in the Meadow Lake, Loon Lake, and Goodsoil areas told the writer in September, 1934, that these advantages had been exaggerated and that in any case they lacked sugar to preserve the wild fruit or ammunition to shoot the game.

seriously damaged by frost or rust or even by the drought which they had thought to be a prairie phenomenon.²⁷ Thus the number of families receiving direct relief, including food, clothing, and hospitalization, in the five new northern administrative divisions of the Bureau of Public Welfare increased from 3,789 in September, 1934, to 5,911 in September, 1935, with a total cost for the relief year 1935-6 of \$793,028, a "very marked increase in hospitalization costs" being observed during the winter of 1935-6.²⁸

Under such conditions the standard of living of most of the settlers has been fully as low as in the hardest hit districts of the wheat belt. House furnishings are usually fewer and clothing generally poorer. The following extracts are taken from the diary of a United Church minister in the area:

Thursday, March 28, 1935. Drove from Carragana—Bell's Hill. . . .

R.— offered to send one of the family to a neighbour's and let us have a bed. . . . They had no hay or oats for our team. We fortunately had a sack of chop in the cutter. They apologized for their food—moose meat, white bread, tea without sugar or milk. They had no fruit, butter or potatoes.

Friday, March 29th. . . . They had gone to the neighbours for additional food supplies and we had potatoes, butter and a pie as "extras" for breakfast. . . . Supper with S.— M.—. Bread, butter, tea (cream and sugar); no meat, fruit or syrup. It is hard for bachelors to get adequate relief he complained. . . . We went to J.— R.—'s for the night. J.— and the man who is "batching" with him slept on the floor while F.— and I had the only bed in the shack. They had a cup of tea and bread without butter before we went to bed.

Saturday, March 30th. . . . J.— had hot cakes for us for breakfast with syrup he made with white sugar and water. He had a drink made from roasted wheat which he called "Bennett Coffee". We had dinner at K.—'s. They had three fried eggs for four people and some potatoes, tea, bread and corn syrup. Relief allowances were always so low that food was very scarce at the end of the month they complained. We went to E.— T.—'s for the night. I had known E.— when I taught school at Davidson 15 years before. Dry years drove him north. He has a small 2-roomed log house.

²⁷Severe August frosts destroyed the oat crop over most of the area in 1934, forcing many on to relief; rust practically wiped out the wheat crop in the north-east, while drought brought light crops over the greater part of the remaining territory in 1935, and over almost the whole area again in 1936, 1937, and 1938.

²⁸Information from the Bureau of Public Welfare and the Northern Settlers' Re-establishment Branch, July, 1935-Oct., 1937. See also *Votes and Proceedings of the Legislative Assembly, Province of Saskatchewan, no. 8, February 22, 1937.* Hospitalization for northern settlers includes doctors' and hospital charges,

Sunday, March 31st. What poverty! Their tea kettle sprung a leak last Fall and the trouble with the relief system said F.— was it assumed that people never required a new lamp chimney, tea kettle or wash basin. For five years they had been seeing one utensil or implement after another wear out without being able to replace it.

Mr. and Mrs. J.— P.— kept us for the night. J.— homesteaded near Strasburg about 30 years ago. He put up good buildings—later bought another quarter on which he paid \$2,000 cash. Finally he lost the half because he could not meet his payments. Mrs. P.— in her early fifties is almost blind because she cannot get the necessary medical care for her eyes.²⁹

In the hope that some plan might be worked out to place these northern relief recipients on a self-supporting basis, the Northern Settlers' Re-establishment Branch of the Department of Municipal Affairs was set up in September, 1935, and immediately began an economic survey of all settlers who had moved into the north since January 1, 1930, and who were dependent on public assistance. An examination of relief rolls disclosed that there were approximately 7,800 settlers in this position and that it would be necessary to include a few settlers who had come in before 1930. The economic survey showed that approximately 90 per cent of the settlers had originally farmed in the dried-out areas of the south, the balance coming from urban centres under various assisted settlement schemes. About 800 were located on land entirely unsuitable for agricultural development while many others had settled on lands upon which the costs of development were prohibitive or which required drainage. Others, unable to obtain homesteads, were squatting on forest and other lands or had purchased holdings, the price and terms of which were far in excess of the productive value of the lands. Examination of individual records also showed that a very large proportion of the settlers lacked both stock and equipment, and that there was a general shortage of machinery, tools, work stock, and productive livestock such as cows, brood sows, and poultry. "Due to the high mortality

dental work (extractions only), transportation of patients to hospitals, sanatoria, and clinics, and funeral expenses (not exceeding \$30). "In the northern local improvement districts, particularly, hospitalization and medical treatment has reached such proportions that it has become a form of state medicine" (Correspondence, April, 1936). See also above chap. v for relief expenditures.

²⁹Diary of the Rev. A. M. Nicholson, March 28-31, 1935, as given to the writer. Mr. Nicholson was stationed at Hudson Bay Junction. For standards of living in marginal districts of the wheat belt, see above, chap. vii.

of horses in the north the position of the settler in respect to work stock was becoming progressively worse."³⁰

A policy of direct relief, far from providing an effective remedy, had served to aggravate the worst features of this situation. The Commissioner in charge of the Northern Settlers' Re-establishment Branch, writing in December, 1936, summarized the weaknesses inherent in such a policy:

Direct relief, which is entirely suited to the farmers in the south with large acreages of arable land, all the necessary stock and equipment, buildings, fencing, and other accommodations and who lack only favorable crop conditions to make them independent of relief, was entirely unsuited to the settlers in the north who often, with no stock, equipment, or capital had to build homes, barns, dig wells, fence land, and clear land for cultivation at considerable cost per acre. Direct relief under such conditions providing, as it did, the bare essentials of living was never able to provide the northern settler with the capital and equipment necessary for development; and as direct relief is only given to the extent that the settler was not able to provide for his own needs, the harder a settler worked the less he got, and the more he sat down and complained the more he received. Under such conditions, it is only to be expected that the settlers would take the course of least resistance, with the result that the original initiative and energy of the settler was progressively sapped until the position of the average northern settler looked pretty hopeless to the observer.³¹

Government action of a more constructive nature was clearly required, but it was vital that government administrators should recognize that northern settlement, if it was to succeed, could not be based on any attempt to imitate the large-scale production of wheat which had been the outstanding characteristic of a prairie economy.³² Soil, climate, and other conditions indicated a more diversified agriculture, including along with livestock and dairy production, the growing of alfalfa,³³ sweet clover, and small fruits

³⁰"Report of the Commissioner of Northern Settlers' Re-establishment", p. 1.

³¹Albert Simmons, "Northern Re-establishment Progress" (*Saskatchewan Farmer*, Dec. 15, 1936, p. 7).

³²"One of the greatest obstacles that had to be overcome in the development of the north was the insistence on approaching the northern settlement problem from a purely prairie agricultural philosophy. The sole objective appeared to be to make the whole north over in the likeness of the prairies by clearing off every particle of bush, by draining every slough or muskeg, with the object of entering into competition with the prairies in production of cereal crops for which it is in no respect suited" ("Report of the Commissioner of Northern Settlers' Re-establishment", p. 3).

³³A total of nearly 50,000 lbs. of Grimm's Alfalfa seed was distributed to northern settlers by the Re-establishment authorities in 1937 and 1938.

on what must be in large measure a self-sufficing rather than a commercial basis.

After further investigation of the problem, an attempt was made in the summer of 1936 to begin the shift from a policy of direct relief to a programme of work credits. Under the new policy settlers falling below a certain economic standard were to be supplied with food, clothing, work stock, equipment, livestock, seed, feed, repairs, and other essentials for the proper development of their holdings, conditional upon their being willing to earn credits covering these advances by the clearing and breaking of their land, erection of buildings, digging of wells, fencing, and similar improvements calculated to assist them in becoming self-supporting.³⁴ It is expected that the average settler will have to be assisted to a general standard which includes up to 50 acres under cultivation, two or more head of work stock, several agricultural implements, two or three cows, one brood sow, 40 to 60 head of poultry, together with sufficient seed, feed grain, food, and clothing to tide him over the time required to achieve an adequate basis for production. Advances, provided through joint contributions by the federal and provincial governments, are expected to vary from \$25, for

"The distribution of forage crop seeds by the Dominion Seed Branch and this office during the last five years has demonstrated the value of alfalfa as a seed crop on the grey bush soils of northeastern Saskatchewan, where good seed-setting and early maturity are characteristics of the crop on these soils. The area north of the Saskatchewan river between Prince Albert and Nipawin has developed alfalfa seed growing to such an extent that a co-operative marketing association, known as the White Fox Alfalfa Seed Growers' Co-operative Marketing Association Limited, has been organized to clean and market the alfalfa seed grown in this district" (*Annual Report of the Field Crops Commissioner, Department of Agriculture, 1936*, Regina, 1937, pp. 135-40). "This association reports the cleaning and marketing of over half a million pounds of alfalfa seed, most of which was exported to the United States. . . . The membership in the association was 98 in 1935, 310 in 1936, and 500 in 1937" (*ibid.*, 1938, p. 84).

"As fast as the settler clears land and makes other improvements, work credits are set up for him, and as fast as he is willing to create these work credits, advances covering work stock, equipment, livestock, etc. are progressively advanced to him. . . . He receives necessary food, and clothing, while the work is being performed on the understanding that if, after a reasonable period of such assistance, he shows no desire or willingness to cooperate, all advances will be withdrawn. In fact, it places the initiative directly on the settler and the harder he is willing to work, the faster advances will be made to him, and each settler is his own pacemaker as to the speed with which he desires to become established" (Simmons, "Northern Re-establishment Progress", p. 7).

a settler almost up to the standard, to \$750 or more for one who has to be moved to new land and furnished with stock and equipment. In January, 1937, it was estimated that more than 5,600 settlers were being given government assistance in some form or other. By the beginning of January, 1939, more than 4,800 settlers had received advances for re-establishment purposes amounting to a total of approximately \$1,100,000; a further 500 applications for loans had been approved; and it was estimated that about 400 additional applications would come up for consideration during the year. Meanwhile expenditures on direct relief had declined from \$1,030,976 in the relief year 1936-7 to \$883,944 in 1937-8, and in January, 1939, the Commissioner was able to report a further reduction of 37 per cent for the first four months of the relief year 1938-9 as compared with the corresponding four months of the previous year.³⁵

Soil survey work has been extended into the new northern districts and the government is proceeding with the re-establishment on available Crown lands of settlers whom it has been found necessary to move from inferior lands. Six blocks of land, involving nearly 100,000 acres, have been taken over from the Department of Natural Resources and prepared for settlement by the re-establishment authorities. For the more heavily timbered blocks, difficult of access, seven diesel type caterpillar tractors were purchased in 1938 to build colonization roads and to clear and break a small acreage for each new settler. By the beginning of January, 1939, about 360 had been moved from unsuitable lands and preparations for moving from 90 to 100 others to one of the new blocks were almost complete.³⁶ On the basis of the information furnished by the economic survey, adjustments in the prices and terms of sale contracts for lands purchased by settlers from institutional and private vendors were secured. Drainage projects completed in 1937 and 1938 will benefit more than 1,000 settlers located on lands which, though of good quality, were subject to annual flooding. Small areas of good land are to be found surrounded

³⁵Information from the Commissioner of Northern Settlers' Re-establishment, Regina.

³⁶*Ibid.*, "We have an agreement with Ottawa whereby they give us \$200,000 for Northern Settlers' Re-establishment, and they have lent us an equal amount, which is charged to the provincial debt" (Evidence of the Hon. R. J. M. Parker, Minister of Municipal Affairs, *Report of Proceedings of the Royal Commission on Dominion-Provincial Relations*, 1937, Dec. 10, 1937, p. 1376).

by low-grade land or hemmed in by northern muskeg but, in addition to the heavy costs of communication and transportation which development would involve, such "pockets" are too small to provide the necessary economic basis for educational, health, and distributive services and for a normal social and community life. It is significant of the limits set to the effective utilization of the poorer gray bush soils under prevailing agricultural techniques that the re-establishment authorities are hard put to find sufficient land of suitable quality to take care of the needs of settlers already in the north and that indications point to the government falling several hundred quarter-sections short of the land required for immediate re-establishment purposes.³⁷

2. REHABILITATION

m (Standards of living in the prairie wheat economy have been depressed by recurring cycles of drought, the overhead costs of intensive specialization in wheat, and dependence on prices determined in world markets.) The record of the last ten years has brought suggestions that the greater part of the area should be abandoned or allowed to revert to range use, although a more general assumption has been that drought would give way to years of greater precipitation and that wheat prices would show a measure of recovery. (Drought and depression have indicated that throughout the region emphasis has shifted from problems of exploitation to problems of conservation and that, accordingly, an attempt must be made to re-establish the economy on a basis which will reduce the waste of human and economic resources in the future.) Individual initiative and local group action will undoubtedly continue to play an important part in the adaptation of agricultural techniques to climatic and soil conditions, but correction of the most glaring mistakes in settlement and land utilization policies demands careful planning and constructive action on a fairly large scale by federal and provincial governments. From the national or social point of view, more is at stake than relief budgets and

³⁷*Ibid.*, pp. 1375-7. "THE CHAIRMAN: I am sure it will be a revelation to a good many people in other parts of Canada, that substantially all land fit for settlement is taken up. HON. MR. PARKER: Well, I believe I can safely say there is no more free land. We do not know of a quarter of a section that is available for homesteading" (p. 1377). See also evidence in the same strain of the Hon. J. G. Taggart, Minister of Agriculture (*ibid.*, Dec. 16, 1937, pp. 2165-6).

rehabilitation expenditures, onerous as the financial burden of these charges may be. Successive years of extreme poverty in a depressing environment have begun to sap the morale of all but the most fortunate or the most determined members of the prairie community and continuance or recurrence of such conditions must ultimately produce a demoralized agricultural population. The unconsidered optimism and gambling spirit engendered by three decades of rapid expansion under favourable economic conditions and concentration on wheat may be replaced, not by more sober and conventional standards of achievement, but by political apathy and the steady deterioration of all social, cultural, and economic standards.

The most substantial adjustments of the immediate future will probably take place within the wheat-growing area and will not involve any major shifts in population to other parts of the Prairie Provinces or the Dominion. The agricultural and settlement possibilities of the northern fringe are frequently exaggerated and in Saskatchewan and Manitoba—no less than in Alberta, "settlers may be just as much or more of a relief problem in certain areas of wooded soils as they are in the dry area, and when the dry area is viewed as an alternative to making a home in the wooded areas, the advantages do not all lie with the latter".³⁸ Further northward migration to the inferior lands of the gray soil zone would merely change the nature of the problems facing Western Canada at the present time without advancing their solution.³⁹ Even in the new northern districts best suited to agricultural development, difficulties in the way of marketing large supplies of a specialized product such as alfalfa seed may be expected to set barriers to the advance of commercial farming. Similarly, a more highly diversified and intensive agriculture in the park belt, capable of absorbing a part of the farming population of the prairies, depends upon the growth of larger domestic and export markets for livestock and livestock products. Mining development in the north may some day help to widen the domestic market materially but cannot be looked upon as likely to make an important contribution within the next few years. At the same time, any beneficial effects of trade agreements

³⁸*A Report on the Rehabilitation of the Dry Areas of Alberta and Crop Insurance, 1935-36* (Edmonton, 1936), p. 45.

³⁹See the Hon. J. G. Gardiner as reported in the *Regina Leader-Post*, July 22, 1937, and above, pp. 202-16, for a discussion of the problems of northern settlement.

and of improved marketing practices and facilities, bringing expansion of the Canadian market for cattle in the United States and for bacon and livestock products in Great Britain, will naturally be enjoyed most fully by more happily situated provinces of the Dominion.⁴⁰

Within the wheat economy readjustments must take account of production trends in other countries since policies of economic nationalism and of self-sufficiency in essential foodstuffs will probably continue to be a strong factor in determining the prices received by Canadian wheat producers,⁴¹ although industry in Europe may ultimately revolt against high food prices. Surplus world wheat stocks, which had accumulated rapidly after 1928, were reduced between 1934 and 1938 by sharply lower yields and at the end of the 1937-8 crop marketing season both world and Canadian carry-overs were back to normal levels or even lower. As a result Canadian wheat prices rose in 1936 and, although subject to fairly wide swings, were maintained for nearly two years at the highest levels since the fall of 1929. However, in 1938, world wheat production reached an all-time record with good yields harvested from a record world wheat acreage; the Winnipeg cash price of No. 1 Northern wheat fell from \$1.49 a bushel in January, 1938, to an average of 59 cents in November, 1938; and governments intervened to support prices paid to growers in all the major wheat-exporting countries, including Canada. Despite a moderate increase in international trade in wheat it is apparent that the world carry-over at August 1, 1939, will again be close to the record levels of 1933 and 1934, and although a reduction in acreage is

⁴⁰See H. A. Innis *et al.*, *The Dairy Industry in Canada* (Toronto, 1937), and the Hon. J. G. Taggart, "The Possibilities of Shifting from Wheat-Growing to Other Types of Farming in Western Canada and the Implications of Such Changes" (*Proceedings of the Conference on Markets for Western Farm Products as arranged by the Government of Manitoba and held in Winnipeg, December 12-15, 1938*, Winnipeg, 1939, pp. 201-13).

⁴¹See T. W. Grindley, "Production Trends and Policies" (*Proceedings of the Seventh Annual Meeting of the Canadian Society of Agricultural Economics, 1935*): "There are still some people who regard the decided trend toward the development of European agriculture as a political and, therefore, ephemeral change, rather than the more permanent social and economic change which it virtually is. Plainly stated, our agricultural structure has been developed in a period of relatively free exchange mainly to supply the cereal and meat deficiencies of countries which have since developed their own agriculture to stages bordering on self-sufficiency" (p. 14).

expected in 1939 (accounted for by decreased sowings in the United States), the world wheat situation must remain unstable and prices continue unsatisfactory.⁴² Present facts and observed trends make it difficult to escape the conclusion, expressed by Dr. Grindley in 1935, that, barring war or prolonged crop failure in Europe, our foreign markets for wheat and other cereals will continue to be both limited and unsheltered so that "for exportable surpluses of wheat in excess of about 200 million bushels, oats in excess of about 7 or 8 million bushels, and feeding barley to the amount of about 2 million bushels, Canada will face strong competition in selling abroad".⁴³ On the basis of the long-time average yield of wheat in Canada, and after allowance has been made for domestic consumption, rather less than 20 million acres would be required to provide the wheat export figure mentioned or fully 5 million acres less than the Canadian seeded acreage in 1938. Yet, clearly, conscious adjustment of Canadian wheat acreage to the probable demands of an export market would be rendered difficult and impracticable—if not impossible—by sharp fluctuations in production on the Canadian prairies and in other world wheat-growing countries.

Nevertheless, while the present situation with respect to world wheat acreage and production cannot be presented as an argument for any drastic change in the nature of Canadian agricultural production, it may be taken to indicate that, even assuming a return to more "normal" climatic conditions, prospects for the profitable production of wheat on inferior grades of prairie wheat land are not encouraging and that possible alternative uses for such lands must be considered. Furthermore, since the prairie plains must at all times be looked upon as areas of both limited and highly variable rainfall, it is necessary to consider also the special problems associated directly and indirectly with recurrent and prolonged periods of drought which seriously affect successful utilization of the better grades of wheat land.

⁴²See *Report of the Royal Grain Inquiry Commission, 1938* (Ottawa, 1938), chaps. ix-xii; *Proceedings of the Conference on Markets for Western Farm Products, 1938*, pp. 1-213, 318-28; *The Agricultural Situation and Outlook, 1939* (Ottawa, 1939), pp. 20-5.

⁴³Grindley, "Production Trends and Policies", p. 15. See also *Report of the Royal Grain Inquiry Commission, 1938*, pp. 153-4; H. C. Grant, "Canadian Agricultural Policy: Some Selected Lessons" (*Journal of Farm Economics*, vol. XIX, Feb., 1937, pp. 253-63).

Although the drought which began in 1929 and which was still apparent in 1938 has been the longest in the history of active settlement on the short grass plains, there seems to be no reason to believe that it marks any permanent change in the climate of the region.⁴⁴ But it is frequently suggested that while the climate may not have changed, certain wheat-farming practices, such as the methods of cultivation associated with summerfallowing, have rendered the land more susceptible to damage by normal climatic conditions. The argument has a limited validity. Soil experts have pointed out that under the semi-arid conditions of prairie agriculture there is little if any depletion of soil fertility as a result of the summerfallow system,⁴⁵ and that there is no evidence that the decrease in soil humus, or decomposed organic matter in the soil, encouraged by summerfallowing is mainly responsible for soil

⁴⁴See B. W. Currie, "The Climate of Saskatchewan" (*Guide to Saskatchewan Agriculture*, published by the Agricultural Extension Department, University of Saskatchewan, Saskatoon, 1936): "There is no reason for believing that our climate is changing. Comparison of Saskatchewan rainfall data with similar data from weather stations in the middle States show the same variations. Some of the American records cover nearly a hundred years, and during that period the rainfall variations have not differed appreciably from those experienced in recent years" (p. 85). A discussion of 23 and 46 year weather cycles in the great plains area by Dr. Charles G. Abbott, climatologist and secretary of the Smithsonian Institute, Washington, was reported in the *Winnipeg Free Press*, Aug. 26 and 27, 1937. See also W. J. Waines, "Problems of the Drought Area in Western Canada" (*Essays in Political Economy in Honour of E. J. Urwick*, Toronto, 1938, pp. 205-18); *A Report on the Rehabilitation of the Dry Areas of Alberta*: "Early records very effectively answer a mis-statement that is frequently made today, namely, that the climate of Western Canada has changed and is becoming more dry as the years go by. This is definitely not so. The Western Plains have always been subject to recurring cycles of deficient rainfall" (p. 11). The early records referred to are those of Palliser (1857-8), Hind (1857-60), and Macoun (1872-9). A convenient summary of the activities and observations of these writers is given by Mackintosh, *Prairie Settlement: The Geographical Setting*, chap. ii. For precipitation records at various representative points in the Prairie Provinces, some of which date back to 1884, see E. S. Hopkins, A. E. Palmer, and W. S. Chepil, *Soil Drifting Control in the Prairie Provinces* (Ottawa, 1937), pp. 49-51; and J. H. Ellis *et al.*, "The Recent Drought Situation in Southwestern Manitoba" (*Scientific Agriculture*, vol. XVI, May, 1936, pp. 478-88).

⁴⁵See A. H. Joel, J. Mitchell, F. H. Edmunds, and H. C. Moss, *Reconnaissance Soil Survey of Saskatchewan from the International Boundary on the South to the Top of Township 48 on the North: Report no. 10* (Saskatoon, University of Saskatchewan, College of Agriculture, 1936), p. 78.

drifting.⁴⁶ It is recognized that "when soils under a grass cover are first broken and cultivated the undecomposed fibrous material of the root systems is a valuable aid in preventing soil drifting" but that "the maintenance of this material in cultivated soils is not possible".⁴⁷ Actually soil drifting "is not peculiar to the western plains, but is to be found in any area where rainfall is limited and high winds pass over dry soil which is in a fine state of cultivation".⁴⁸ Despite the lack of fibrous root material in most prairie wheat land, very little soil drifting occurred between the years 1920 and 1930 and in the later twenties some of the lighter lands of south-western Saskatchewan, abandoned during former periods of drought and drifting, were re-occupied. However, with drier seasons, wind erosion has become so widespread on some of the best as well as on the poorest arable lands that it must now be viewed as one of the most serious problems of prairie agriculture.⁴⁹ The permanent damage resulting has probably been much greater, except on the heavy black soils, than is generally realized and much good land has been reduced to marginal quality.⁵⁰

⁴⁶*Ibid.* See also *Guide to Saskatchewan Agriculture*, p. 11, and J. Mitchell, "The Extent and Areas Subject to Soil Drifting in Saskatchewan" (*Report of the Regional Committee on Soil Drifting appointed under the National Advisory Committee on Agricultural Services and the Prairie Farm Rehabilitation Act*, Lethbridge, mimeo., 1935): "It is a notable fact that the heavy silty soil of the Melfort area has been observed to drift fairly severely on some farms in spite of favourable moisture conditions and the high organic matter content of the soil" (p. 15).

⁴⁷Joel et al., *Reconnaissance Soil Survey of Saskatchewan: Report no. 10*, p. 78.

⁴⁸*A Report on the Rehabilitation of the Dry Areas of Alberta*, p. 26.

⁴⁹"Almost any cultivated land of this area [the brown and dark brown prairie soil zones] is subject to some drifting, but it remains true that light soils and heavy soils are more susceptible than intermediate textures, with certain notable exceptions dependent upon soil type" (Mitchell, "The Extent and Areas Subject to Soil Drifting in Saskatchewan", p. 14). See also H. C. Moss, "Some Field and Laboratory Studies of Soil Drifting in Saskatchewan" (*Scientific Agriculture*, vol. XV, June, 1935, pp. 665-79); F. A. Wyatt, "Extent and Areas susceptible to Soil Drifting in Alberta"; and J. H. Ellis, "Soil Drifting in Manitoba" (*Report of the Regional Committee on Soil-Drifting*).

⁵⁰"Soil drifted from one acre, to a depth of one inch, is equivalent to the removal of approximately 694 pounds of nitrogen, 155 pounds of phosphorus and 5,380 pounds of potash. The above amount of phosphorus alone is approximately equal to that removed from the soil in the production of 485 bushels of wheat. . . . The influence of drifting on soil productivity, as reflected in the yields of subsequent crops, varies greatly with different soil and subsoils. There are a few localities with deep soils that have had five or six inches of soil blown off and still

To check damage from soil drifting on the heavier and intermediate grades of land, modifications of certain tillage practices have taken place, new methods are being introduced, and new control techniques are being evolved. When the affected centres are small knolls or ridges of higher ground, the spreading of straw or manure or the ploughing of furrows at right angles to the prevailing winds are frequently effective in preventing rapid enlargement of the field area subject to drifting. When drifting has assumed more serious proportions, such devices as the ploughless fallow, strip farming, and the use of cover crops have been widely adopted. The ploughless fallow involves the replacement of the mouldboard plough, the disc-harrow, and the spike tooth harrow by such implements as the one-way disc, the duck-foot cultivator, and the rod-weeder, all designed to avoid pulverizing the soil and to leave the stubble and other trash on the surface or mixed through the soil in such a manner as to check the possibilities of wind erosion, no more cultivation being carried out than is necessary to conserve moisture by destroying weed growth. Strip farming, which has been used with considerable success for many years in southern Alberta and for a shorter period in south-western Saskatchewan, requires the breaking up of large fields into alternate strips of crop and fallow, the strips varying from 5 to 20 rods in width depending on the susceptibility of the soil to drifting. Since careful methods of cultivating the fallow strips must be followed, the use of the ploughless fallow is commonly combined with strip farming. Cover crops, consisting of a light seeding of wheat, oats, or barley on summerfallow early in August, after being killed by the frost, provide effective control of soil drifting during the succeeding winter and spring months, but use of this method of control has been restricted in the drought area since it involves sacrificing part of the soil moisture conserved by the summerfallow system. Methods of combatting wind erosion are not always successful, but by skilful combination of methods and constant care to meet emergency

produce good crops. In the majority of cases, however, where two or four inches of top soil have been lost, crop yields have been much lower for many years afterwards. In some cases the injury appears to be almost permanent" (Hopkins *et al.*, *Soil Drifting Control in the Prairie Provinces*, p. 6). See also *A Report on the Rehabilitation of the Dry Areas of Alberta*, p. 29; J. H. Ellis, "The Effects of Soil Drifting on Soil Productivity" (*Report of the Regional Committee on Soil Drifting*, Swift Current, 1938, mimeo., pp. 41-6).

conditions with emergency measures it can be largely controlled except in the worst areas and in the worst years.⁶¹

The new method of ploughless summerfallowing is cheaper than the old standard practice of ploughing followed by further cultivation, though some other methods of controlling soil drifting discussed, such as strip farming and use of cover crops, bring increases in operating costs. Nevertheless, such increases are relatively small compared with the outlay required in permanent re-grassing of knolls and ridges or the introduction of grass-seeding as part of the crop rotation of wheat farming with a view to putting back fibre in the soil. The latter appears likely to remain commercially impracticable because of the great difficulty of getting a "catch" in dry years and the unsatisfactory yields of such forage crops under prairie conditions.⁶²

The planting of tree-belts and hedges on a large scale to protect field crops against soil drifting and to lessen evaporation is conceded by those possessing any scientific knowledge or practical experience of prairie conditions to be out of the question because of the physical and climatic conditions which would have to be overcome and the expense which would be entailed. The Superintendent of the Dominion Forest Nursery Station at Indian Head has recently declared that "there is no scientific basis for, or data to support, the assumption that either climate can be changed or precipitation increased by any tree planting programme which it might be practical to undertake on farm land specially adapted to cereal cropping",⁶³ at the same time going on to state, with respect to

⁶¹For fuller descriptions of methods used in combatting soil drifting on cultivated lands see Hopkins *et al.*, *Soil Drifting Control in the Prairie Provinces*, *passim*; *Reports of the Regional Committee on Soil Drifting, 1935-8*, *passim*; *Guide to Saskatchewan Agriculture*, pp. 8-12; *A Report on the Rehabilitation of the Dry Areas of Alberta*, pp. 26-31; and the Hon. J. G. Taggart, "The Maintenance of Dry Land Farming on the Southern Prairies" (*C.S.T.A. Review*, no. 6, Sept., 1935, pp. 331-7).

⁶²See Taggart, "The Maintenance of Dry Land Farming on the Southern Prairies", pp. 335-6. See also Hopkins *et al.*, *Soil Drifting Control in the Prairie Provinces*, pp. 35-6; S. Barnes, "Economic Aspects of Drought Resistance" (*Scientific Agriculture*, vol. XII, Dec., 1931, pp. 206-8); H. J. Kemp and H. A. Purdy, "Suitable Cereals for Dry Land Farming on the Prairies" (*ibid.*, vol. XVI, Nov., 1935, pp. 135-40); *Guide to Saskatchewan Agriculture*, pp. 29-34; and Joel *et al.*, *Reconnaissance Soil Survey of Saskatchewan: Report no. 10*, pp. 78-9.

⁶³Norman M. Ross, "The Role of Trees in Modifying the Agriculture of the Dry Areas of the Prairie Provinces" (*Scientific Agriculture*, vol. XVI, Jan., 1936, p. 266).

much less ambitious tree-planting projects, that "it is quite impractical to start shelterbelts in dry districts during protracted periods of drought".⁵⁴

➔ After full allowance has been made for actual and possible improvements in tillage and cultural practices, there still remain considerable areas of cultivated lands on many of the lighter soil types where serious damage from soil drifting has already taken place and upon which all tried methods of control have failed. It is essential that such lands should be withdrawn from cultivation and returned to range use with the least possible delay since their continuance in wheat production is a constant menace to better farm lands over a wide area. [In the late twenties Alberta made provision for the administration of a number of "special areas"⁵⁵ which had proved unfit for cereal production and in 1936 Saskatchewan set up a Land Utilization Board under a special pro-

⁵⁴*Ibid.*, p. 269. "If a farmer is able to maintain a modest number of trees and hedges close to his buildings he will do exceedingly well. The effort involved in the planting and maintenance of extensive shelterbelts and hedges is entirely beyond the capacity of a great majority of the farmers. Even if trees and shelter belts did do all that is claimed for them as protectors of field crops, very few farmers could command the energy necessary to maintain such extensive plantations" (Taggart, "The Maintenance of Dry Land Farming on the Southern Prairies", p. 337). "It is an obvious fact that windbreaks which have become established and which have attained a height of from 8 to 12 feet will break the force of the wind and thus give some protection to the crop for from 100 to 150 feet on the leeward side of it, but in order to be completely effective in controlling soil drifting it would mean that hedges of the height mentioned would have to be established every 10 rods at right angles to the prevailing wind. Granting that such a system of hedges would be effective in controlling soil drifting and to some extent would lessen evaporation by preventing hot winds from blowing along the surface of the ground, there remains the difficulty of getting these windbreaks established. First, there is the difficulty of getting a suitable material for a windbreak that is cheap, and secondly, in districts where they are most needed the danger of the young trees being smothered by tumbleweeds and drifting soil is a very real problem. Caragana hedges are probably the most suitable kind of hedge material for the dry areas, and the experience of many farmers has been that while it is not impossible, there is great difficulty in getting them successfully established under open field conditions" (*A Report on the Rehabilitation of the Dry Areas of Alberta*, p. 24). See also A. M. Shaw, *Drought on the Canadian Prairies* (Saskatoon, University of Saskatchewan, Agricultural Extension Department, 1934), p. 6; and Hopkins *et al.*, *Soil Drifting Control in the Prairie Provinces*, p. 35.

⁵⁵See G. A. Elliott, "Problems of a Retrograde Area in Alberta" (Mackintosh *et al.*, *Economic Problems of the Prairie Provinces*, pp. 291-4).

vincial statute with power to withdraw lands from cultivation and to control the use of grazing lands, while in 1937 officials of rural municipalities were given power to prohibit any cultivation which might cause damage to surrounding crops.⁵⁶

There are further areas of inferior prairie farm land where the necessity of finding an alternative use is less urgent but which cannot support any reasonable standard of living by wheat production except under an unusually favourable conjuncture of wet seasons and high wheat prices. Abandonment of farms on these soil types has been heavy during the past eight or nine years as the census of 1936 indicates⁵⁷ and may be expected to continue as long as drought conditions persist, though provision of direct relief and agricultural aid on an extensive scale combined with the cancellation of taxes and reduction of indebtedness⁵⁸ will operate to check the rate of abandonment. These marginal and sub-marginal lands bring difficult economic and political problems to land utilization boards, to municipal administrators, and to both provincial and federal governments. "The problem of the farmer", as Dr. Isaiah Bowman has said of a similar situation in the United States, "turns on the question, How far can he go in reaping the bounty of the land in wet years and yet survive the penalties of inevitable drought? The problem of the government is to determine whether a man shall be allowed to grow grain in places where he *can* do so and *ought* not to."⁵⁹ But governments can never safely forget that the marginal producer "still lives, with an appetite, unpaid debts, and a vote".⁶⁰ If, as appears likely in some districts, effective utilization involves reorganization of an area into larger farm units in order to support a smaller agricultural population at a decent standard of living, great administrative patience, tact, and skill

⁵⁶*Statutes of Saskatchewan*, 25 Geo. V, c. 62; 1 Edw. VIII, c. 81; and 1 Geo. VI, c. 67. This legislation was consolidated and extended in The Soil Drifting Act, 1938, and The Land Utilization Act, 1938, being *Statutes of Saskatchewan*, 2 Geo. VI, c. 60 and c. 62, respectively. The Board consists of the Deputy Ministers of Agriculture, Municipal Affairs, and Natural Resources, the Chairman of the Local Government Board, and the Heads of the Farm Management and Soils Departments at the University of Saskatchewan.

⁵⁷See above, pp. 37-8 and 202-3.

⁵⁸See above, chap. v, sec. 3 and sec. 4.

⁵⁹Isaiah Bowman, "The Land of your Possession" (*Science*, vol. LXXXII, Sept. 27, 1935, p. 289).

⁶⁰Herbert Heaton, *Economic History of Europe* (New York, 1936), p. 633.

must be exercised in securing removal of some of the present occupants, not to mention the difficulties to be faced in re-establishing them in another part of the country. Thus land utilization boards will find it necessary to proceed cautiously under powers to withdraw from cultivation any lands which may become the property of a rural municipality through tax-sale proceedings or otherwise. The powers contained in the 1938 consolidation of the Saskatchewan Land Utilization Act permitting expropriation, with compensation to be decided by arbitration of "any property which the Board deems necessary for the purpose of carrying out any land utilization scheme or project",⁶¹ though useful in bringing pressure on institutional holders, will doubtless be used very sparingly in dealing with actual occupants under title. Furthermore, though it is clear that the poorest wheat lands must be returned to grass and a ranch economy, the proper use, or combination of uses, for other and rather larger areas of low-grade land now under wheat⁶² will be more difficult to determine.

Beginning in 1935, with a view to the collection of information upon which a positive land utilization policy might be based, the federal and provincial governments and the Universities of Saskatchewan and Alberta have co-operated in extensive surveys of representative drought-stricken areas in the south-western and south-central parts of Saskatchewan and in southern Alberta. The surveys of 1935 and 1936 each included seven rural municipalities in Saskatchewan and roughly similar areas in Alberta. Information concerning date and mode of acquisition, tenure, past and present use of land, soil, topography and stoniness, wheat yields, pasture rating, size and condition of buildings, kinds and numbers of livestock, availability of water, farm receipts and expenditures, period and amount of relief (both direct and agricultural), tax delinquency and indebtedness, etc., was collected for several thousand farms together with details of schools, roads, telephones and other community services, abandoned farms, and unoccupied lands. Further extensive surveys were carried out in 1937 and 1938,⁶³ including aerial photographic surveys for land

⁶¹*Statutes of Saskatchewan*, 2 Geo. VI, c. 62, s. 11. See also 2 Geo. VI, c. 63, The Expropriation (Rehabilitation Projects) Act, 1938.

⁶²For a discussion and classification of the adaptability of Saskatchewan soils to wheat production, see above, chap. i and particularly table II.

⁶³Classification and analysis of these data are proceeding. On the Saskatchewan surveys see: *Physical and Economic Factors Related to Land Use*

classification purposes of blocks of 10,000 square miles in each province.

In April, 1935, the federal government passed the Prairie Farm Rehabilitation Act "to provide for the rehabilitation of drought and soil drifting areas in the Provinces of Manitoba, Saskatchewan and Alberta".⁶⁴ The financial appropriation for work under the Act was \$750,000 for the fiscal year 1935-6 with further provision for expenditures not exceeding \$1,000,000 annually in each of the four succeeding years, but with two years' work completed the 1937-8 appropriation was increased to \$2,000,000. Extension of activities necessitated a further increase to \$3,500,000 (including \$500,000 for water storage projects such as Caron and Saskatoon) for the fiscal year 1938-9. Administration is vested in the federal Minister of Agriculture, who is assisted by an advisory committee comprising officials of the federal and provincial governments and representatives of farmers and ranchers in the afflicted areas and of financial and railway interests. The rehabilitation programme includes:⁶⁵

Classification in Southwest Central Saskatchewan (Ottawa, 1938); W. J. Hansen, "Some Facts concerning Life Insurance in South-Western Saskatchewan" (*Economic Annalist*, vol. VI, Feb., 1936, pp. 6-10); C. C. Spence, "Land Utilization in Southwest Central Saskatchewan" (*ibid.*, Dec., 1936, pp. 84-8); G. C. Elliott, "Real Estate Indebtedness in Southwest Central Saskatchewan" (*ibid.*, vol. VII, Feb., 1937, pp. 8-14), and "A Study of Wheat Yields in South Central Saskatchewan" (*ibid.*, vol. VIII, June, 1938, pp. 35-40). On the Alberta surveys see W. N. Watson, "A Study of 126 Abandoned Farms in the Lomond Area of Southern Alberta" (*ibid.*, vol. VI, June, 1936, pp. 38-44); W. J. Hansen, "Life Insurance Carried by Farmers in the Lomond and Vulcan Districts, Alberta" (*ibid.*, Oct., 1936, pp. 76-9); G. H. Craig "Objectives in the Alberta Land Utilization Survey" (*ibid.*, pp. 70-1); "Land Settlement and Tenancy in the Lomond and Vulcan Districts, Alberta" (*ibid.*, April, 1937, pp. 22-3); "The Acquisition of Land in the Vulcan-Lomond Area of Alberta" (*ibid.*, Oct., 1937, pp. 68-74); "Land and Agricultural Organization in Southern Alberta" (*ibid.*, Dec., 1937, pp. 84-9); "Indebtedness of Farm Operators in the Vulcan-Lomond Areas of Southern Alberta" (*ibid.*, Feb., 1938, pp. 3-9 and *ibid.*, April, 1938, pp. 21-4). See also A. Stewart, "Economic Surveys in the Drought Area" (*ibid.*, June, 1937, pp. 39-43).

⁶⁴*Statutes of Canada*, 25-26 Geo. V, c. 23. See also 1 Geo. VI, c. 14, an amendment widening the scope of the original Act to include land utilization and land settlement. To facilitate co-operation with the federal authorities the Saskatchewan government in 1938 amended the Provincial Lands Act, 1931, and passed the Expropriation (Rehabilitation Projects) Act, 1938, being *Statutes of Saskatchewan*, 2 Geo. VI, c. 15 and c. 63 respectively.

⁶⁵See *Annual, Summary, Progress*, and other reports of activities under the

- (1) Engineering and financial assistance to individuals and communities in the construction of dug-outs, stock watering dams, and irrigation schemes where feasible.
- (2) Financial assistance in re-establishment of farmers now on sub-marginal lands and re-seeding of these lands for community pasture purposes.
- (3) Assistance in developing a sheep and cattle policy in connection with sub-marginal lands fenced for community pasture purposes.
- (4) Establishment of a fully equipped soils laboratory at the Swift Current Experimental Station for the purpose of continuing investigations of soil moisture and soil drifting in the drought area and of large-scale soil moisture conservation projects, including contouring, terracing, and furrowing, to determine the value of such work.
- (5) Organization of agricultural improvement associations in which individual farmers and ranchers organize for community activity including strip farming and other methods to control soil drifting, regrassing work, and tree planting.
- (6) Establishment of reclamation stations to reclaim land for agricultural use and to re-establish a suitable grass cover on land which has been severely damaged by drought and soil drifting.
- (7) Establishment of District Experiment Sub-stations, as outposts of the Dominion Experimental Farms, where special problems have been found, for fact-finding and demonstrational purposes.
- (8) Continuation of economic, soil classification, and other surveys in the drought area in co-operation with the provincial agencies.
- (9) Grass development for the purpose of determining improved methods of establishing grass on land subject to soil drifting.
- (10) Tree planting, including free distribution of trees and large-scale demonstrations of field shelter belts.

Prairie Farm Rehabilitation Act for the years 1935, 1936, 1937, and 1938. Total expenditures under the programme amounted to \$3,203,038 as at March 31, 1938, of which \$2,814,115 was charged to P.F.R.A. and \$388,923 to a Western Conservation Works Vote under *Statutes of Canada*, 25-26 Geo. V, c. 34, administered by the P.F.R.A.

At the beginning of 1939, 48 District Experimental Sub-stations (5 in Manitoba, 31 in Saskatchewan, and 12 in Alberta) had been set up and nearly 20,000 farmers were members of the 150 Agricultural Improvement Associations (15 in Manitoba, 89 in Saskatchewan, and 46 in Alberta) organized in the drought area, while numerous reclamation and other projects had been established and much valuable work, both of a practical and of an experimental nature, had been done.

However, up to the present, a large part of the energies of the Rehabilitation Administration has been concentrated on water development work aiming at the conservation of reserves of spring run-off water for domestic, stock-watering, and irrigation purposes. Engineering advice is given on individual projects and financial assistance provided up to a maximum of \$150 for either a dug-out or a stock-watering dam, and \$350 for a small irrigation scheme.⁶⁶ When two or more farmers co-operate on a single project, financial assistance is advanced according to the number of farms to be served. A steadily increasing interest in these small water development projects is reflected in payments made to farmers which rose from \$4,790 in the fiscal year 1935-6 to \$85,000 in 1936-7, \$230,000 in 1937-8, and \$444,000 (estimated) in 1938-9. At January 1, 1939, 8,434 projects had been completed in the three provinces (5,218 dug-outs, 2,569 stock-watering dams, and 647 small irrigation schemes) out of a total of 17,854 applications received.⁶⁷

Larger irrigation projects designed to serve entire communities have been undertaken directly by the Rehabilitation Administration and to the end of the 1938 field season 15 irrigation schemes of this nature had been completed or enlarged and repaired, involving approximately 126,000 acre feet of water and 90,000 acres of

⁶⁶A dug-out is defined as being a relatively small excavation on the ground for the collection of water; a stock-watering dam, as an earthen structure across a relatively deep basin to be used for watering stock; a small irrigation dam, as an earthen dam across a basin or coulee to collect the spring run-off water for the purpose of irrigating relatively level land below the dam, a storage capacity of approximately 50 acre feet being the basis for assistance.

⁶⁷All statistical information from W. L. Jacobson, Secretary, Advisory Committee on Land Utilization and on Water Development, Prairie Farm Rehabilitation Offices, Regina. Completion of 2,535 dug-outs, 186 stock-watering dams, and 2 irrigation schemes was reported in Manitoba; 2,420 dug-outs, 1,594 stock-watering dams, and 370 small irrigation projects in Saskatchewan; and 263 dug-outs, 782 stock-watering dams, and 265 small irrigation projects in Alberta.

irrigable land at a total cost estimated at \$1,268,360. In Alberta, where a number of large irrigation works had previously been constructed and where the conditions for irrigation are relatively favourable owing to close proximity to the eastern watershed of the Rocky Mountains and to the existence of many rivers flowing from the foothills, irrigation development under the rehabilitation programme has been confined largely to the repairing and extension of existing projects. Of Saskatchewan, the Secretary of the Advisory Committee on Water Development, after a careful review of all suggested schemes, reported in April, 1938:

While 1,215,000 acres of land are irrigable . . . so far as engineering feasibility and water supply are concerned, over 925,000 acres of this area could not be irrigated without the construction of works that would be too costly. The most that can be economically irrigated in Saskatchewan is estimated at 100,000 acres so far as the construction of community projects is concerned. In addition approximately 150,000 acres may be irrigated by the development of individual schemes, making a potential maximum of 250,000 acres of irrigable land in the province. This area is not large compared to the potential irrigable area in Alberta where mountain streams provide more abundant water supplies and where topographical conditions afford more opportunity for diverting water economically.⁶⁸

The most significant development in Saskatchewan has been in the Cypress Hills area of the south-west, where construction of dams at each end of Cypress Lake has created a reservoir with a storage capacity of 70,000 acre feet which will guarantee reserve supplies of water for the irrigation of more than 20,000 acres of land further down the watershed, including approximately 10,000 acres on the Frenchman River to the east and 10,000 on Battle Creek to the west. A substantial part of this acreage has now been brought under irrigation and nearly 4,000 acres in one block at Val Marie on the Frenchman River were seeded to wheat, oats, and forage crops in 1938. The Rehabilitation Administration proposes to divide this irrigated land into parcels of about 80 acres each to be allocated to local farmers and ranchers for the production of reserve supplies of feed and fodder. Smaller community irrigation projects have been undertaken on the Souris and Moose Mountain rivers in the south-east.

⁶⁸W. L. Jacobson, *Prairie Relief and Rehabilitation* (Regina, 1938, mimeo.), p. 8. See also E. S. Archibald, "Prairie Farm Rehabilitation" (*C.S.T.A. Review*, March, 1938, pp. 359-70). Dr. Archibald is Director of Dominion Experimental Farms Service, and Chairman, Land Utilization Committee, Prairie Farm Rehabilitation Administration.

The Water Development Committee has emphasized that "the expenditures made for the construction of irrigation projects are not regarded in the same sense that irrigation development has been regarded in the past, particularly in Alberta".⁶⁹ The chief objects as outlined by the Committee are:

- (1) To ensure feed supplies against recurrent drought conditions.
- (2) To stabilize the livestock industry by establishing economic units in livestock production.
- (3) To give subsistence to the farm and ranch home.
- (4) To aid in bringing about a more stable land utilization policy.
- (5) To alleviate the relief problem by employing local labour and teams on dam construction.

Heavy crops of wheat and oats on irrigated lands at Val Marie while crops on other lands were a complete failure have increased the pressure for gigantic irrigation schemes but it appears extremely unlikely that the Rehabilitation Administration will embark upon any large-scale irrigation projects for field crops.

Thirty years of irrigation experience in the province of Alberta does not hold out much hope of solving the agricultural problems of southern Saskatchewan by this method. This is particularly true when it is remembered that conditions for irrigation are generally somewhat less favorable in Saskatchewan than they are in Alberta. Moreover, if the entire run-off from the dry area could be conserved and diverted to irrigation and the province's share of the river flow used for the same purposes, only a small

⁶⁹*Progress Report: Water Development Committee appointed under the Prairie Farm Rehabilitation Act, 1935* (Swift Current, Nov., 1935, mimeo.), p. 3. With respect to the small projects the Committee declares "it is not so much irrigation in the strict sense of the word, but the storing of runoff water to insure at least one crop of feed and work along with natural conditions as near as possible". In the larger projects in both Saskatchewan and Alberta the Committee has been influenced by the experience of the latter province: "In recommending the applications for new irrigation works the Committee has not been unmindful of the serious financial difficulties encountered by existing projects and also, according to estimates, that more than \$50,000,000 have been spent in works to serve some million acres of land of which only about fifty per cent has so far been irrigated. The basic importance of these projects to the communities served has been kept in mind, however, and while overdevelopment in the past has contributed largely to the present financial difficulties, there are areas throughout the plains region where irrigation is feasible and the building of comparatively small community projects would provide means of growing feed and by stabilizing agriculture in this way serve to achieve in considerable measure the purpose of the rehabilitation program" (*Summary Report: Water Development Committee*, Swift Current, Nov., 1935, mimeo., pp. 2-3).

part of the open plains region could be put under the ditch. An enormous area of dry land, which it is both physically and economically impossible to irrigate, would remain to be farmed by methods somewhat similar to those which are now followed.⁷⁰

It may well be doubted whether less ambitious individual and community irrigation schemes can go far toward ensuring feed supplies for the great majority of wheat farmers in the drought area.

Closely related to the water conservation programme in its various aspects is the utilization as community pastures of areas of non-arable land and of land which has proved unsuitable for wheat-growing. Such projects involve only slight movements of population. Control of land held by private individuals or corporations is secured by surrender, exchange for other land, or lease, following which the area selected is fenced, provided with stock-watering facilities, and if necessary, re-grassed. When the pasture is ready for use the neighbouring farmers are organized into a grazing association, the council of which decides the number of stock each member may place in the pasture. The Dominion authorities insist on an agreement with the province concerned giving full control of all lands involved as a precaution against the possibility of re-settlement in the future. Saskatchewan is the only province which has entered into such an agreement with the Dominion government although it is expected that Manitoba and Alberta will sign agreements in the near future. In Saskatchewan 36 pastures were completed in 1937 and 1938 involving a total area of 650,000 acres, and a further 44 projects involving 1,200,000 acres are proposed for completion in 1939.⁷¹ Another development of a similar nature is the proposed establishment of reserve pastures for use only in years of severe drought. Three such projects, to include more than 3,000,000 acres, have been tentatively selected

⁷⁰Taggart, "The Maintenance of Dry Land Farming on the Southern Prairies", p. 334. See also Shaw, *Drought on the Canadian Prairies*, p. 8; *Water Resources Paper no. 75: Surface Water Supply of Canada: Arctic and Western Hudson Bay Drainage (and Mississippi Drainage in Canada) in Alberta, Saskatchewan, Manitoba and Western Ontario, Climatic Years 1933-1934 and 1934-35* (Ottawa, 1937); and J. T. Johnson, "Surface Water Supply and Runoff of the Prairie Provinces" (*Engineering Journal*, vol. XVIII, April, 1935, pp. 181-93). For a list of major irrigation works in Alberta and a discussion of possible irrigation projects in Alberta and Saskatchewan, see Mackintosh, *Prairie Settlement: The Geographical Setting*, pp. 107-10.

⁷¹Information from W. L. Jacobson.

for range improvement in connection with the irrigation projects of the Cypress Hills area.⁷²

Thus the water conservation programme, combined with community pastures and other land utilization measures, is likely to be most effective as a stabilizing influence in the agricultural life of south-western Saskatchewan and south-eastern Alberta. Up to now the combination of wheat growing and ranching frequently favoured for the arid, broken, and inferior lands of this region has not been attended by very satisfactory results, since in years of drought the farmer-rancher has had neither a wheat crop to sell nor feed for his livestock.⁷³ Consequently, in addition to provision of direct relief and seed grain, governments have also found it necessary to ship in large quantities of feed and fodder or make arrangements to ship out large numbers of livestock to be sold in poor condition and at a heavy loss.⁷⁴ It has been established "that those farmers who have been able to maintain themselves in the dry area, are using three or four and in some cases, seven sections of land to maintain the family unit. They have their own holdings of one or two sections and are either using under lease or squatters rights, abandoned farms adjoining them, for pasture and forage purposes."⁷⁵ But the provision of transportation, school, health, telephone, distributive and other services in areas where the most efficient farm unit covers several square miles and farm-houses are widely

⁷²See *Report of Proceedings under the Prairie Farm Rehabilitation Act for the Fiscal Year ending March 31, 1938* (Ottawa, 1938, mimeo.), p. 24.

⁷³See *A Report on the Rehabilitation of the Drought Areas of Alberta*, pp. 37-8.

⁷⁴This situation developed in a particularly acute form in 1936 and 1937. See files *Regina Leader-Post*, June-Nov., 1936 and 1937.

⁷⁵*A Report on the Rehabilitation of the Drought Areas of Alberta*, p. 39. This does not mean that ranching is necessarily the main concern of such an operator since throughout the region a minimum of 30 acres is commonly considered necessary to provide pasture and feed for one head of livestock under normal conditions. If land has been overgrazed—and practically all of it is in this condition—or in periods of drought, as much as 120 acres per head may be required. See above *Report*, p. 38; L. B. Thomson, Superintendent of the Dominion Experimental Station at Swift Current, on "The Carrying Capacity and Improvement of Grazing Land" as reported in the *Western Producer*, June 3, 1937; S. Barnes, "Economic Aspects of Drought Resistance" (*Scientific Agriculture*, vol. XII, Dec., 1931, p. 206); and *Report of the Royal Commission of Inquiry into Farming Conditions in Saskatchewan* (Regina, 1921), pp. 44-5; B. Russell and W. H. Snelson, "Report on Southern Alberta Drought Area East of Range 13, Bounded by Red Deer and South Saskatchewan Rivers" (Edmonton, 1924, type-written), pp. 6-7.

separated is both difficult and expensive. To overcome these disadvantages, it has been suggested that it might be possible, especially in districts where some land is under irrigation, to re-organize settlement in community centres.⁷⁶ In each instance a large community pasture, or individual grazing lands, around the centre would provide summer grazing while the irrigated plots would supply other feed and fodder and also garden requirements. Wheat would be raised on the best land, as it is now in such areas, full advantage being taken of power equipment to offset the increased distances which the farmer would find it necessary to travel to and from his work.⁷⁷

Nevertheless such a programme leaves the central problem of the majority of prairie wheat growers virtually untouched and efforts of rehabilitation and other agencies to bring about any substantial increase in the economic security of the farming population of the region meet formidable obstacles. Over wide areas the absence of streams and the insignificance of any "run-off" of surface water preclude irrigation schemes of any kind, while the usefulness of "dugouts" which "plains farmers have been making for forty years and more . . . is strictly limited to furnishing water for stock or for household purposes, and at best they have only an indirect bearing upon the solution of the drought problems of the prairies".⁷⁸ Diversification actually increases the risk in the dry areas since farmers are rendered "particularly vulnerable when large numbers of livestock are kept on the farms".⁷⁹ In the fight against drought certain hazards may be reduced by improved cultural practices which will check deterioration of soil resources, by the steady progress made in combatting insect pests and plant diseases,⁸⁰ and by advances in the breeding of varieties of wheat

⁷⁶See "Pasture and Irrigation Policies for Drought Area approved at Rehabilitation Meeting in Regina" (*Regina Leader-Post*, June 2, 1937). See also "A Plan of Settlement for the Dry Area" (*A Report on the Rehabilitation of the Drought Areas of Alberta*, pp. 45-59).

⁷⁷*Ibid.*

⁷⁸Shaw, *Drought on the Canadian Prairies*, p. 8.

⁷⁹*Ibid.*, p. 11. "The guiding principle as to numbers of livestock in the dry farming areas should always be the minimum number required to adequately supply family needs" (*A Report on the Rehabilitation of the Dry Areas of Alberta*, p. 52).

⁸⁰See above, chap. iv, sec. 4.

possessing increased drought-resisting qualities.⁸¹ Furthermore, as the size of the average farm unit tends to increase, greater mechanization may bring economies in operation except in periods of depressed agricultural prices⁸² and on some soil types the extended use of commercial fertilizers may be profitable⁸³ but both involve striking increases in cash operating costs.

The creation of reserves of seed, feed, and fodder in years of plenty to be drawn upon in years of shortage and crop failure is to be commended as a policy though attended with certain practical difficulties in performance. For as the Minister of Agriculture for Saskatchewan has stated: "This problem is not so simple as it may appear at first sight. There is a natural human tendency for individuals to spend their resources when they have them. There is also a tendency for creditors to insist on payment to the extent of reducing reserves to a dangerously low point. Farmers need protection on the one hand, and in some cases they need actual inducement and encouragement to retain sufficient of their crops to provide reserves against possible disaster in the future."⁸⁴ The admonition to conserve financial resources against the day when it fails to rain is even more a counsel of perfection. The principle might have been respected by a larger number of individual farmers in many of the more prosperous districts during the good years immediately prior to 1929, but now, even assuming a return to normal crops and satisfactory prices, it will take the individual farmer many years to pay off the heavy arrears of relief, tax, mortgage and other indebtedness and make good the depreciation of buildings, equipment, and furnishings before he can turn to the business of building up financial reserves.⁸⁵

⁸¹See J. B. Harrington, "Cereal Crop Improvement for Dry Farming Conditions" (*Scientific Agriculture*, vol. XVI, Nov., 1935, pp. 113-20); and H. J. Kemp and H. A. Purdy, "Suitable Cereals for Dry Land Farming on the Prairies" (*ibid.*, pp. 135-40).

⁸²For a discussion of the trend toward larger farm units and increased mechanization, see above, chap. iv, sec. 2 and sec. 3.

⁸³"The medium textured soils in drier areas of the southwest require further testing over a period of years to prove what value phosphate fertilizers may have" (*Guide to Saskatchewan Agriculture*, p. 12).

⁸⁴Taggart, "The Maintenance of Dry Land Farming on the Southern Prairies", p. 336.

⁸⁵For an analysis of agricultural debt adjustment schemes to Jan. 1, 1939, and the burden of uncanceled relief, taxes, real estate, and other indebtedness, see above, chap. v, sec. 3.

Collective provision of reserves under a comprehensive system of crop insurance has been suggested as one method of achieving a more stabilized prairie agriculture.⁸⁶ The satisfactory record of the Saskatchewan Municipal Hail Insurance Association in affording protection against one of the important hazards of wheat production⁸⁷ has encouraged many to think that a similar scheme might be extended to cover the risks of drought, frost, plant diseases, insect pests, and price variations. The record of crop insurance as written by various commercial and mutual companies in the states of Kansas, Minnesota, North and South Dakota, Montana, Idaho, and Washington, over a period of 33 years (1899-1932) is not encouraging, although the 1937 crop insurance measure of the United States federal government appears to be based on sounder principles.⁸⁸ In Western Canada it is recognized that there are many difficulties to be overcome in evolving a satisfactory scheme. Crop yields are influenced not only by climatic conditions, soil, and topography, but also by the industry, intelligence, and

⁸⁶See *Preliminary Report of the Committee on Crop Insurance* (Regina, 1937); W. J. Hansen, "Economic Aspects of Crop (Yield) Insurance with reference to the Province of Saskatchewan" (*Proceedings of the Ninth Annual Meeting of the Canadian Agricultural Economics Society*, Saskatoon, June, 1937, mimeo., pp. 47-58); *A Report on the Rehabilitation of the Drought Areas of Alberta and Crop Insurance, 1935-36. Part II: Crop Insurance*, pp. 64-80; Taggart, "The Maintenance of Dry Land Farming on the Southern Prairies", p. 336; and A. M. Shaw, "Rehabilitation of the Drought Area" (*Alumni Bulletin*, University of Saskatchewan, vol. V, April, 1935). For a discussion of crop insurance possibilities in the United States, see V. N. Valgren, *Crop Insurance: Risk, Losses and Principles of Protection* (U.S. Department of Agriculture Bulletin no. 1043, Washington, 1922); E. W. Hoffman, "The Outlook for Crop Insurance" (*Annals of the American Academy*, March, 1929), and "Insurance for Agriculture" (*ibid.*, May, 1932).

⁸⁷See above, chap. iv, sec. 4, and *Directors' and Auditor's Reports of the Saskatchewan Municipal Hail Insurance Association for the years ending January 31, 1919-38*.

⁸⁸See *Report and Recommendations of the President's Committee on Crop Insurance* (Washington, 1936); *Hearings before a Sub-committee of the Committee on Agriculture and Forestry of the United States Senate on a Bill to Create a Federal Crop Insurance Corporation and for Other Purposes, February-March, 1937* (Washington, 1937); and *Hearings before a Special Subcommittee of the Committee on Agriculture, House of Representatives on S. 1397 to Create a Federal Crop Insurance Corporation and for Other Purposes, May-June, 1937* (Washington, 1937). The Home Insurance Company of New York wrote some crop insurance in Saskatchewan and Alberta in 1921 but incurred losses and withdrew. For a review of earlier crop insurance plans and policies in the different states, see *Preliminary Report of the Committee on Crop Insurance*, pp. 4-7.

farm management practices of the operator, so that it would be necessary to protect the efficient producer against carrying the burden of insurance for less competent and less industrious farmers. Costs of administration would tend to be high since collection of accurate individual production records upon which to determine individual premium rates and coverage would be essential together with adequate supervision to check abuses and misrepresentations and make adjustments where crops are of depreciated or doubtful value. There would also be the problem of establishing and maintaining an insurance scheme on a sound financial basis, for over areas where the need would be greatest premiums or insurance taxes would be high, representing an extremely heavy burden, in all except the most prosperous years. Widespread tax delinquency would quickly imperil the stability of any plan. A large reserve fund would be required to meet the risk of crop failure over wide areas for a period of years. At the present time in addition to the administrative and financial difficulties enumerated, the Saskatchewan Committee on Crop Insurance has pointed out "that in considering a workable plan of insurance the committee has been confronted with the situation created by poor land and worn out equipment in some districts, and large amounts of outstanding indebtedness in all districts. This makes the payment of even a modest premium seem difficult, if not impossible."⁸⁹ Any mutual or co-operative organization going into the field of crop insurance would be forced to (1) make a careful selection of areas in which to operate, or (2) make arrangements for re-insurance of a large part of its risk, which might be difficult, or (3) await "a favourable sequence of crop years in an initial period of operation during which substantial reserves could be built up".⁹⁰ Nevertheless, assuming that a workable scheme can be hammered out, crop insurance, with strong financial support from the federal government during the initial period of building up a reserve fund (plus contributions from the provincial governments as soon as their revenues will permit), commends itself as part of a programme of agricultural rehabilitation, as an alternative to relief, as a device for collective saving through contributions from the farmers when conditions improve,

⁸⁹*Ibid.*, pp. 12-13.

⁹⁰Hansen, "Economic Aspects of Crop (Yield) Insurance with reference to the Province of Saskatchewan", p. 156.

and as one means whereby the extreme variability of income of the prairie wheat grower may be mitigated.

The rehabilitation of the wheat economy also involves national support for social and community services which have achieved an important place in modern conceptions of civilized life and which provide an important part of the standard of living of the inhabitants of the region. For the experience of the last ten years has shown that the Prairie Provinces cannot maintain, through periods of economic depression and crop failure, the minimum standards of social and community services which are, by common consent, considered appropriate to Canada. The collapse of rural municipal finance and the threatened disintegration of municipal institutions imposed additional burdens on provincial governments⁹¹ and the Governor of the Bank of Canada has recently indicated with respect to each of the Prairie Provinces that the policy of drastic economy has gone too far to permit the provincial governments to perform their functions satisfactorily and efficiently or to maintain their capital assets.⁹² It may be conceded

⁹¹See above, chap. vi.

⁹²See *Reports on the Financial Position of the Provinces of Manitoba, Saskatchewan and Alberta, 1937* (Ottawa, Bank of Canada, 1937). "That capital expenditures in connection with the highways and hospitals, and increased current expenditure for education, public health and highway maintenance (to mention certain main items only) will soon be essential cannot be doubted" (*Report on Manitoba*, p. 20). "The lack of adequate maintenance expenditure on the highway system, for example, has allowed it to deteriorate, so that much larger sums will now be necessary to rebuild it. It is difficult to single out the individual services which have suffered most severely, but something should be said of the need for additional expenditure for the care of the insane and for cases of serious illness, and also concerning the plight of education in general and rural school teachers in particular. The school teachers are in part the responsibility of the rural municipalities which, however, are in a large part of the province, completely bankrupt. The current level of teachers' pay is distressingly low, and the standards of education must eventually suffer. In brief, retrenchment of ordinary expenditures has been carried as far as, and in some instances farther than reasonable, and current ordinary expenditures are at a level which it may be neither possible or desirable to maintain" (*Report on Saskatchewan*, p. 14). "Increased expenditures are anticipated in virtually every department, but particularly on highways and on public health services. There is unquestionably pressing need for some expansion in expenditures for the care of the insane and seriously ill. . . . Education in general and the rural school teacher in particular have been forced to bear a disproportionate share of governmental economies during the depression" (*Report on Alberta*, p. 28).

that the development of Alberta to 1929 was characterized by lavish government spending on telephones, railways, highways, and irrigation schemes⁹³ and that the large capital expansion programme of the Saskatchewan provincial government from 1930 to 1932 under which \$30,000,000 was spent on highways, power lines, farm loans, etc., "can under the circumstances then existing, only be described as grossly extravagant".⁹⁴ It may also be true that Saskatchewan's failure to tax more effectively the surplus of the good years prior to 1929 to provide "adequate reserves for possible fluctuations in wheat crops or prices was a fundamental weakness".⁹⁵ However, it has been shown that "dependence on wheat not only means violently fluctuating income and government revenues, but also an income which is difficult to reach by taxation, and one which at best provides a small taxable margin",⁹⁶ while in 1936 the Report of a Royal Commission in Saskatchewan recognized the difficulties inherent in any attempt to adjust the tax structure of the province to meet the requirements of such a situation.⁹⁷ Slight administrative improvements may be expected together with greater caution in undertaking capital expenditures involving increases in fixed costs, yet it seems doubtful whether any system of public finance could be devised capable of building up reserves sufficient to maintain a reasonable level of social services over a period of years, when income from wheat almost disappears.

Of more immediate concern is the recognition that "although one good year would cause a substantial improvement in the current position, it does not appear that the economy affords an adequate basis to support the costs of the services now demanded from

⁹³See Bank of Canada *Report on Alberta*, pp. 4-8 and 34. But "from any point of view, if regard is had to the necessities of rapid development, Alberta's public debt in 1929 could not be regarded as being materially out of line with the rest of Canada" (Courtland Elliott and J. A. Walker, *Report to Alberta Bondholders' Committee: A Survey of the Fiscal Problems of the Province of Alberta in relation to the Economic and Social Conditions affecting them*, Edmonton, 1937, chap. iv, p. 28).

⁹⁴Bank of Canada *Report on Saskatchewan*, p. 12.

⁹⁵*Ibid.*, p. 8.

⁹⁶W. J. Waines, "Federal Public Finance: Canada" (*Canadian Journal of Economics and Political Science*, vol. III, May, 1937, p. 196).

⁹⁷See *Report of the Commission of Inquiry into Provincial and Municipal Taxation to the Government of Saskatchewan, 1936* (Regina, 1936). For Alberta, see *Report on the Alberta Tax Inquiry Board on Provincial and Municipal Taxation* (Edmonton, 1935).

provincial governments under the present distribution of financial powers and responsibilities".⁹⁸ Yet it may be assumed that the inhabitants of the prairie plains will not readily tolerate further reduction or elimination of expenditures on education, hospitalization, care for the aged and destitute, roads and communications, and other services provided by provincial and municipal governments.⁹⁹ Reduction to the present scale has thrown a heavy strain on political institutions in all the Prairie Provinces with default and repudiation emerging as possible alternatives to further sacrifices.¹⁰⁰ Such drastic policies ease the immediate pressure enormously, but have undesirable social, political, and economic repercussions and can scarcely be regarded as offering a satisfactory solution of the problem. It should be possible to discover a more orderly solution by making use of the broader and more stable economic base afforded by the Dominion. Furthermore, it may be argued that considerations of national well-being require that all Canadians, regardless of where they may live, be guaranteed certain minimum Canadian standards of education and health at least,¹⁰¹ and that only assumption by the Dominion government of the financial burden of a large part of the costs of education, hospitalization, mothers' allowances, etc. (in addition to old age pensions and relief expenditures), coupled with provision for a flexible system of emergency grants to meet immediate and pressing needs as they arise from year-to-year fluctuations in net income, can give this

⁹⁸Bank of Canada *Report on Saskatchewan*, p. 27. See also *Report on Manitoba*, p. 24. Further recognition of this situation is implied in the terms of reference of the Royal Commission on Dominion-Provincial Relations set up by the federal government in August, 1937.

⁹⁹See *Report of the Commission of Inquiry into Provincial and Municipal Taxation to the Government of Saskatchewan, 1936*, p. 9.

¹⁰⁰See G. E. Britnell, "Alberta, Economic and Political: The Elliott-Walker Report" (*Canadian Journal of Economics and Political Science*, vol. II, Nov., 1936, pp. 524-32); and Waines, "Federal Public Finance: Canada". "By default Alberta has attempted to spread the costs of the depression more evenly" (*ibid.*, vol. III, p. 195).

¹⁰¹The ultimate national or social aim should perhaps be widened, as Professor V. W. Bladen has suggested in "The Economics of Federalism" (*Canadian Journal of Economics and Political Science*, vol. I, Aug., 1935, pp. 348-51): "Looking to the future there are two objectives: (a) to achieve some rough equality in standard of living as between the provinces; and (b) to guarantee the financial ability of the government of each of the provinces to perform adequately the functions which are required of it, with reasonable standards of efficiency and economy. Of these two objectives too much attention has been paid to the latter, too little to the former" (p. 351).

measure of security to the vulnerable and exposed sections of the Canadian economy. Administrative questions such as adequate federal supervision of expenditures and centralized collection of certain taxes appear to present no insuperable difficulties.¹⁰² Finally, while claims for special grants are better advanced on the grounds of need rather than as compensation for the effects of federal policy, it has been recognized "that throughout the twenties, Saskatchewan was contributing substantially to the prosperity of business—and taxpayers—in other sections of the country".¹⁰³

In conclusion, it may be said that there is no simple solution to the problems presented by violent fluctuations in net income in the prairie wheat economy. Standards of living declined rapidly after 1930, although this decline was checked by temporary stabilization at or near relief levels in succeeding years. But with continued crop failures and with relief schedules too narrow in their application and too niggardly in the provision of essentials to maintain standards even at sharply reduced levels, further declines took place. A good crop at an improved price would, assuming creditors exercised a reasonable forbearance, make it possible to check deterioration and effect some replacements, but restoration to the moderate levels of the late twenties would require an unusual succession of good crops together with a favourable relationship of prices and costs. Assuming a return to "normal" wheat crops and incomes, permitting a measure of effective economic and social rehabilitation, it appears likely that the new levels will be lower than those which obtained in the region prior to the depression. At the same time, continued dependence on wheat, combined with the limitations imposed by geography and climate on any attempts to achieve a larger measure of self-sufficiency in farm family living over most of the area, indicates that the economy will continue to be subject to marked fluctuations in standards of living.

¹⁰²See W. J. Waines, "Problems of Public Finance in the Prairie Provinces" (*Canadian Journal of Economics and Political Science*, vol. III, Aug., 1937, pp. 355-69). For a discussion of Australian experience with grants from the federal government to the states through the Commonwealth Grants Commission, see J. A. Maxwell, "Federal Public Finance: Australia" (*ibid.*, vol. III, May, 1937, pp. 197-201), and for a discussion of unconditional and conditional subsidies, *Federal Subsidies to the Provincial Governments in Canada* (Cambridge, Mass., 1937), chaps. xiv and xviii.

¹⁰³Bank of Canada *Report on Saskatchewan*, p. 4. See also R. McQueen, "Economic Aspects of Federalism: A Prairie View" (*Canadian Journal of Economics and Political Science*, vol. I, Aug., 1935, pp. 352-67); and D. C. MacGregor, "The Provincial Incidence of the Canadian Tariff" (*ibid.*, pp. 384-95).

APPENDIX

COST OF LIVING ON FARMS IN SASKATCHEWAN

(i) KINDERSLEY, 1929-30
(218 farms)

	No. farms with item	Total value	Average per farm with item	Average for all farms
Groceries, meat, fruit, etc.....	210	\$75,717	\$361	\$348
Farm products bought, milk, etc...	118	3,697	31	17
Light and fuel.....	209	19,531	93	90
Domestic help.....	30	5,048	168	23
New furnishings.....	178	13,180	74	61
Clothing.....	208	34,097	164	157
Health.....	173	9,943	57	46
Life insurance.....	124	18,036	145	83
Personal, social, vacations, etc.....	211	23,107	110	106
Education.....	206	9,672	47	44
Charity and church.....	191	7,036	37	32
Auto, personal.....	182	9,421	52	43
TOTAL.....	218	\$228,485	...	\$1,050
Rent of house (10 per cent of value)	216	\$27,838	\$129	\$128
Meat, produced and consumed on farm.....	204	14,187	70	65

(ii) TURTLEFORD, 1929-30
(182 farms)

	No. farms with item	Total value	Average per farm with item	Average for all farms
Groceries, meat, fruit, etc.....	181	\$71,333	\$394	\$392
Farm products bought, milk, etc..	64	2,593	41	14
Light and fuel.....	171	4,078	24	22
Domestic help.....	17	2,020	119	11
New furnishings.....	144	8,729	61	48
Clothing.....	176	29,856	170	164
Health.....	135	9,657	72	53
Life insurance.....	78	7,190	92	40
Personal, social, vacations, etc.....	168	18,036	107	99
Education.....	176	4,635	26	26
Charity and church.....	143	3,301	23	18
Auto, personal.....	104	5,502	53	30
TOTAL.....	182	\$166,930	...	\$917
Rent of house (10 per cent of value)	181	\$19,767	\$109	\$109
Meat, produced and consumed on farm.....	164	12,666	77	70
Value of farm fuel.....	160	10,109	63	55

(iii) DAVIDSON, 1930-1
(135 farms)

	No. farms with item	Total value	Average per farm with item	Average for all farms
Groceries, meat, fruit, etc.....	135	\$37,732	\$279	\$279
Farm products bought, milk, etc..	45	604	13	4
Light and fuel.....	135	13,663	101	101
Domestic help.....	33	4,199	127	31
New furnishings.....	19	919	48	7
Clothing.....	134	14,879	111	110
Health.....	111	8,638	78	64
Life insurance.....	96	16,883	175	125
Personal, social, vacations, etc....	135	9,013	67	67
Education.....	79	5,239	66	39
Charity and church.....	104	2,496	24	19
Auto, personal.....	108	4,530	42	34
TOTAL.....	135	\$118,795	...	\$880
Rent of house (10 per cent of value)	135	\$25,642	\$190	\$190
Meat, produced and consumed on farm.....	132	9,174	70	68

(iv) RICHMOUND AND BURSTALL, 1930-1
(79 farms)

	No. farms with item	Total value	Average per farm with item	Average for all farms
Groceries, meat, fruit, etc.....	79	\$21,005	\$266	\$266
Farm products bought, milk, etc..	34	728	21	9
Light and fuel.....	79	6,239	79	79
Domestic help.....	17	1,101	65	14
New furnishings.....	15	987	66	12
Clothing.....	79	10,789	137	137
Health.....	66	5,177	78	65
Life insurance.....	33	3,730	113	48
Personal, social, vacations, etc....	79	6,375	81	81
Education.....	52	2,624	50	33
Charity and church.....	58	1,637	28	21
Auto, personal.....	68	3,347	49	42
TOTAL.....	79	\$63,739	...	\$807
Rent of house (10 per cent of value)	79	\$9,938	\$126	\$126
Meat, produced and consumed on farm	78	6,173	79	78

(v) MAPLE CREEK, 1930-1
(54 farms)

	No. farms with item	Total value	Average per farm with item	Average for all farms
Groceries, meat, fruit, etc.....	54	\$14,415	\$267	\$267
Farm products bought, milk, etc. .	30	1,021	34	19
Light and fuel.....	53	2,866	54	53
Domestic help.....	7	547	78	10
New furnishings.....	13	798	61	15
Clothing.....	54	6,185	114	114
Health.....	41	2,485	61	46
Life insurance.....	35	2,988	85	55
Personal, social, vacations, etc.....	54	4,535	84	84
Education.....	49	1,442	29	27
Charity and church.....	39	954	24	18
Auto, personal.....	45	2,571	57	48
TOTAL.....	54	\$40,807	...	\$756
Rent of house (10 per cent of value)	54	\$5,405	\$100	\$100
Meat, produced and consumed on farm.....	49	4,041	82	75

(vi) ROSEMOUNT AND REFORD, 1931-2
(243 farms)

	No. farms with item	Total value	Average per farm with item	Average for all farms
Groceries, meat, fruit, etc.....	243	\$54,633	\$225	\$225
Farm products bought, milk, etc..	31	520	17	2
Light and fuel.....	242	16,802	69	69
Domestic help.....	51	2,927	57	12
New furnishings.....	34	1,561	46	6
Clothing.....	243	27,396	113	113
Health.....	152	9,030	59	37
Life insurance.....	116	13,463	116	55
Personal, social, vacations, etc. . .	223	10,714	48	44
Rent of house, cash.....	2	140	70	1
Education.....	141	4,697	33	19
Charity and church.....	146	2,635	18	11
Auto, personal.....	151	6,689	44	28
TOTAL.....	243	\$151,207	...	\$622
Rent of house (10 per cent of value)	238	\$26,958	\$113	\$111
Meat, produced and consumed on farm.....	195	12,696	65	52

(vii) SCOTT, 1931-2
(114 farms)

	No. farms with item	Total value	Average per farm with item	Average for all farms
Groceries, meat, fruit, etc.....	114	\$19,793	\$174	\$174
Farm products bought, milk, etc..	45	293	7	3
Light and fuel.....	113	10,208	90	90
Domestic help.....	16	953	60	8
New furnishings.....	5	138	28	1
Clothing.....	114	8,799	77	77
Health.....	66	5,279	80	46
Life insurance.....	60	8,776	146	76
Personal, social, vacations, etc....	109	4,227	38	37
Education.....	79	1,784	23	16
Charity and church.....	64	2,245	35	20
Auto, personal.....	83	3,062	37	27
TOTAL.....	114	\$65,557	...	\$575
Rent of house (10 per cent of value)	114	\$29,699	\$261	\$261
Meat, produced and consumed on farm.....	108	5,918	55	52

(viii) WELLINGTON, 1931-2
(78 farms)

	No. farms with item	Total value	Average per farm with item	Average for all farms
Groceries, meat, fruit, etc.....	78	\$10,850	\$139	\$139
Farm products bought, milk, etc..	46	348	8	4
Light and fuel.....	77	4,732	61	61
Domestic help.....	2	55	28	1
New furnishings.....	3	18	6	—
Clothing.....	77	4,674	61	60
Health.....	30	2,227	74	29
Life insurance.....	18	2,208	123	28
Personal, social, vacations, etc....	73	1,805	25	23
Education.....	43	240	6	3
Charity and church.....	21	228	11	3
Auto, personal.....	38	1,092	29	14
TOTAL.....	78	\$28,477	...	\$365
Rent of house (10 per cent of value)	77	\$8,270	\$113	\$106
Meat, produced and consumed on farm.....	73	3,000	51	38

(ix) BROKENSHELL, 1931-2
(56 farms)

	No. farms with item	Total value	Average per farm with item	Average for all farms
Groceries, meat, fruit, etc.....	56	\$8,338	\$149	\$149
Farm products bought, milk, etc..	35	265	8	5
Light and fuel.....	55	2,948	54	52
Domestic help.....	3	339	113	6
New furnishings.....	5	133	27	2
Clothing.....	54	3,341	62	59
Health.....	32	872	27	16
Life insurance.....	28	2,560	91	46
Personal, social, vacations, etc....	47	1,501	32	27
Education.....	33	1,073	33	19
Charity and church.....	14	159	11	3
Auto, personal.....	28	882	32	16
TOTAL.....	56	\$22,411	...	\$400
Rent of house (10 per cent of value)	56	\$5,364	\$96	\$96
Meat, produced and consumed on farm.....	50	2,525	51	45

(x) GRENFELL—WOLSELEY, 1932-3
(203 farms)

	No. farms with item	Total value	Average per farm with item	Average for all farms
Groceries, meat, fruit, etc.....	203	\$32,542	\$160	\$160
Farm products bought, milk, etc...	49	581	12	3
Light and fuel.....	195	3,554	18	18
Domestic help.....	17	1,240	73	6
New furnishings.....	21	447	21	3
Clothing.....	198	12,716	64	62
Health.....	134	8,431	63	42
Life insurance.....	105	11,228	107	55
Personal, social, vacations, etc....	179	5,862	33	28
Education.....	130	4,066	31	20
Charity and church.....	111	2,145	19	11
Auto, personal.....	94	2,976	32	15
TOTAL.....	203	\$85,788	...	\$423
Rent of house (10 per cent of value)	202	\$36,095	\$179	\$177
Meat, produced and consumed on farm.....	201	9,368	47	46

(xi) BALCARRES—INDIAN HEAD, 1932-3
(122 farms)

	No. farms with item	Total value	Average per farm with item	Average for all farms
Groceries, meat, fruit, etc....	122	\$20,103	\$164	\$164
Farm products bought, milk, etc..	22	246	11	2
Light and fuel.....	119	5,644	47	46
Domestic help.....	27	1,322	49	11
New furnishings.....	17	291	17	3
Clothing.....	120	7,885	66	64
Health.....	100	7,269	73	60
Life insurance.....	67	12,218	182	100
Personal, social, vacations, etc....	112	4,785	43	39
Education.....	89	2,388	27	20
Charity and church.....	68	1,066	16	9
Auto, personal.....	57	2,154	38	18
TOTAL.....	122	\$65,371	...	\$536
Rent of house (10 per cent of value)	122	\$56,045	\$459	\$459
Meat, produced and consumed on farm.....	119	6,606	56	54

(xii) NEUDORF—LEMBERG, 1932-3
(89 farms)

	No. farms with item	Total value	Average per farm with item	Average for all farms
Groceries, meat, fruit, etc.....	89	\$10,499	\$118	\$118
Farm products bought, milk, etc..	8	69	9	1
Light and fuel.....	87	1,118	13	13
Domestic help.....	10	528	53	6
New furnishings.....	4	137	34	2
Clothing.....	89	6,152	69	69
Health.....	64	2,264	35	25
Life insurance.....	17	2,215	130	25
Personal, social, vacations, etc. ...	89	2,243	25	25
Education.....	42	1,689	40	19
Charity and church.....	75	1,574	21	17
Auto, personal.....	25	1,007	40	11
TOTAL.....	89	\$29,495	...	\$331
Rent of house (10 per cent of value)	89	\$13,220	\$149	\$149
Meat, produced and consumed on farm.....	87	3,234	37	36

(xiii) HUMBOLDT, 1933-4
(455 farms)

	No. farms with item	Total value	Average per farm with item	Average for all farms
Groceries, meat, fruit, etc.....	455	\$64,461	\$142	\$142
Farm products bought, milk, etc..	41	404	10	1
Light and fuel.....	449	6,579	15	14
Domestic help.....	79	2,391	30	5
New furnishings.....	157	5,139	33	11
Clothing.....	455	48,238	106	106
Health.....	371	20,791	56	47
Life insurance.....	157	13,255	84	29
Personal, social, vacations, etc....	422	17,228	41	38
Education.....	389	5,988	15	13
Charity and church.....	353	10,155	29	22
Auto, personal.....	175	6,982	40	15
TOTAL.....	455	\$201,611	...	\$443
Rent of house (10 per cent of value)	453	\$43,208	\$95	\$95
Meat, produced and consumed on farm.....	446	30,004	67	66

INDEX

- "Advancement" goods, 195-6
 Agreements of sale, 85-8
 Agricultural Improvement Associations, 229
 Agricultural societies, 115-22; effect of drought on, 117-18; junior organization, 119-20; provincial grants to, 117; women's organization, 120-1
 Allen, William, 76-7, 82
 Anglo-Saxon population, 15-16, 19, 160, 162
 Anti-Tuberculosis League, 138
 Arran, 28
 Assiniboine River, 2
 Associated Countrywomen of World, 121
 Associations, voluntary, 183-6
 Austrian population, 17
 Automobile, 41, 180-1; influence on retail trade, 25, 29

 Balcarres-Indian Head, 81, 159-60, 163, 167, 174, 177, 181, 196-7, 252
 Barley, 10, 48, 53-4
 Battle Creek, 230
 Bengough, 169, 172
 Big Beaver, 169
 Biggar, 23
 Big Manitou, 2
 Birth-rate, 17-19
 Boards of Review, 84
 Bowman, Isaiah, 225
 Brokenshell, 81-2, 155, 159-60, 163, 165, 174, 197, 250
 Brown Prairie plains, 5-6; soils of, 5, 8-10
 Buffalo Gap, 169
 Bureau of Child Protection, 146
 Bureau of Public Welfare, 211
 Burstall, 245

 Cadillac, 171
 Canadian Northern Railway, 12
 Canadian Pacific Railway, 12, 34
 Canadian Pioneer Problems Committee, 164
 Canadian Wheat Board, 74
 Caron, 227
 Carrot River Valley, 15, 45, 51, 64
 Catholic Church, 146, 196
 Chautauqua, 186
 Cheese factories, 29, 31
 Chinook winds, 4
 Cities, distributing centres, 23

 Climate, 4
 Clothing, 171-2
 Cold Lake, 209
 College of Physicians and Surgeons, 141
 Colonization Finance Corporation of Canada, 47
 Combines, 41-2
 Commission of Enquiry into Libraries, 121
 Committee on School Finance and School Grants, 1933, 112
 Communists, 184
 Conservative Association, 184
 Co-operation, consumers', 27
 Co-operative Commonwealth Federation, 184
Country Guide and Nor'-West Farmer, Winnipeg, 195
 Crown lands, 202-3, 205, 207, 215
 Cultivation, land under, 9, 36-7
 Cypress Hills, 1, 5, 230, 233; Lake, 230

 Dairying, 48; creameries, 29, 30-1
 Davidson, 155, 159, 164-5, 167-8, 174, 181, 196-7, 244
 Death-rate, 18, 21
 Debt, 79-89; adjustment, 84-6; amount, 86-8; in 1920's, 79-80; increase since 1930, 80-1; items causing, 82-3; postponement, 83-4; regional differences, 81-2
 Debt Adjustment Act, 1933, 83
 Debt Adjustment Board, 83, 88
Deutscher Bund, 184
 District Experimental Sub-stations, 228-9
 Dominion Entomological Laboratory, Saskatoon, 63
 Dominion Experimental Farms, 228
 Dominion Forest Nursery Station, Indian Head, 223
 Dominion Mortgage and Investments Assoc., 85
 Drainage, 1-4
 Drought, 48, 51-2, 60-2, 107, 117-18; *see also* Rehabilitation, Relief, and Saskatchewan Relief Commission
 Dutch population, 16

 Edenwold Junior Agricultural Society, 119
 Edmonton, 12

- Education, 101-25, 209-10; expenditure on, 196; higher, 113-15; primary, 101-11; secondary, 110-13; *see also* Agricultural societies and Libraries
- England, Church of, 187-8, 190
- Estevan, 12
- Farmers' Creditors Arrangement Act, 1934, 84, 86, 89
- Farms, abandoned, 38; acreage under crops, 36-7; facilities on, 177-82; living expenditures, 152-68, 242-54; size, 38-9, 44; value of property, 39-40
- Federal Grain Co., 29
- Federated Women's Institute of Canada, 121
- Flax, 10, 48, 53, 54
- Food, 168-71
- Forage crop, 54-5
- Free Press Prairie Farmer*, Winnipeg, 195
- Frenchman River, 2, 230
- French population, 15-17, 19, 160, 188, 190
- Frost, 59
- Gardening, 55
- German-Canadian Organization, 184
- German-Canadian United League, 184
- German population, 15-17, 19, 160, 184, 188, 190, 196
- Good Soil district, 207
- Government Correspondence School, Regina, 111-12
- Government Open Shelf Library, Regina, 124-5
- Government Travelling Library, 122-4
- Grain elevators, 29-30
- Grand Trunk Pacific, 12
- Gravelbourg, 17, 139, 142, 171, 180, 190
- Great Continental Plain, 1
- Grenfell-Wolseley district, 81, 159-60, 163, 167-8, 174, 181, 196-7, 251
- Grindley, T. W., 219
- Hail, 65-8
- Health, 136-43, 240; dental clinics, 142; doctors' grants, 136, 141; hospitalization, 136-7, 142; medical relief, 140-2; public health nursing, 139; state medicine, 143; tuberculosis, 138
- Health Unit, 139
- Highways and roads, 25, 129-35, 240; construction, 129-30; government expenditure, 1928-37, 130, 132-3; influence on retail trade, 25; reduced outlays on, 134-5; relief work, 89, 130-1, 134
- Homemakers' Clubs, 120-2; junior, 121
- Homesteads, free, 36, 203, 205-6; purchased, 36
- House furnishings, 175-7
- Housing, 172-5
- Humboldt, 17, 23, 81, 160, 162, 165, 254
- Hungarian population, 16
- Icelandic population, 19
- Illegitimacy, 19
- Immigration, *see* Population
- Income: *gross*, 69-75; decline, 1920-38, 70-1; farm prices, 1920-38, 71-4; other sources of revenue, 74-5; variability, 69. *net*, 75-9; cash returns per wheat acre, 77-8; commodity prices, 78-9; operating and living expenses, 77-9
- Indian Head, 174
- Indians, 19
- Industrial School for Boys, Regina, 146
- Insect pests, 52, 62-4
- Insurance, crop, 236-8; hail, 65-8; life, 74-5
- Irrigation schemes, 229-33
- Jack Fish Lake, 2
- Johnstone Lake, 2
- Katholischer Volksverein*, 184
- Keewatin ice sheet, 5
- Kincaid, 171
- Kindersley, 42, 157, 164-5, 167, 174, 177, 181, 196-7, 242
- Knights of Columbus, 183
- Labour, family and hired, 43, 162
- La Flèche, 17
- Land, classification, 203-5; tenure, 44-7, and racial origin, 47, and standard of living, 162-4; *see also* Soil
- Land Utilization Board, 224
- Last Mountain Lake, 2
- Leader district, 17
- Leisure, 191-3
- Liberal Association, 184
- Libraries, 121-5
- Limitation of Civil Rights Act, 1933,

- 83; amendment to, 1935, 83
 Livestock, 40-1, 56-9, 71-2
 Livingstone, 28
 Lloydminster, 59
 Loon Lake, 207
 Lutherans, 184, 187-90
- Machinery, 39-43
 Mackintosh, W. A., 69, 75-6
 Mail, delivery, 182; order, 27-9
 Manufacturing, based on agriculture, 31-3; distribution of employed by industry groups, 33; production statistics, 33
 Maple Creek, 54-5, 82, 162, 165, 174, 180-1, 196-7, 246
 Marriage-rate, 18, 20; intermarriage, 20
 Masonic lodge, 183
 Meadow Lake, 207
 Mechanics' and Literary Institutes, 121-2
 Melfort, 23, 59
 Mennonites, 17, 35, 184
 Mills, flour and grist, 29-30
 Mixed farming, 48
 Moose Jaw, 12, 15, 24, 103, 172
 Moose Mountain, 1, 230
 Mortgages, 85-9; companies, 47
 Mortlach-Chapin area, 172
 Motion pictures, 186
 Municipal Hail Act, amendment to, 67
- Nazi propaganda, 185
 Neudorf-Lemberg district, 81, 159-60, 162-3, 165, 196-7, 253
 Newspapers, 195
Der Nordwesten, Winnipeg, 195
 North Battleford, 23-4, 51, 59
 Northern settlement, 202-16
- Oats, 10, 48, 52-3
 Oddfellows' lodge, 183
 Ontario School for Blind, Brantford, 146
 Orange lodge, 183
- Park belt, 5-6, 10, 44, 52, 57-8, 166
 Pelly, 28, 179
 Permanent Cancer Commission, 139
 Pioneer Grain Co., 30
 Polish population, 15-16, 160
 Population, 13-22; birth-place, 16-17; density, 15; distribution, by age groups, 21, urban and rural, 14-17; immigration, 13-14; national origin, 15-16, and standard of living, 160-1; natural increase, 18, 21-2
 Prairie Farm Rehabilitation Act, 1935, 227
 Prairie plains, 5, 44, 48, 165-6
 Precambrian Shield, 1
 Precipitation, 4; evaporation, 60; variability, 60
 Prices, commodities, 78-9; farm, 71-4; wheat, 72-4, 218-19
 Prince Albert, 12, 15, 17, 23-4, 34, 59, 116
 Protestant Church, 146, 187-8
 Provincial Land Regulations, 204
 Provincial Lands Act, amendment to, 205
- Qu'Appelle, Diocese, 190; River, 2
 Quill Lakes, 2, 17
- Railways, 11-13; construction, 12; proximity of farms to, 12-13; steam, 12; stimulus to settlement, 13
 Ranching, 5, 48, 224-6, 233
 Recreation, 193-4, 196-7
 Red Cross, 93
 Red River Valley, 62
 Reford, 80, 167, 247
 Regina, 9, 12-13, 15, 23-4, 27, 45, 103, 117, 180, 185, 193; plains, 45, 119, 131, 174, 177, 196
Regina Leader-Post, 195
 Rehabilitation, 216-41; obstacles to, 234-5; programme, 228; surveys, 226-7; *see also* Northern settlement
 Rehabilitation Administration, 229-31
 Reliance Grain Co., 30
 Relief, 76, 89-99, 170; government expenditure, 89-99; indebtedness, 81, 85-6; in north, 207-8, 210-15; medical, 140-2; old age pensions, 148-9; road work, 89, 130-1, 134; voluntary, 91, 93; *see also* Saskatchewan Relief Commission
 Relief Acts, 1934, 96
 Religion, contributions, 195-6; organizations, 186-91
 Richmond, 82, 162, 181, 196-7, 245
 Roads, *see* Highways
 Roman Catholics, 187-9, 191
 Root-rot, 65
 Rosemount, 80, 167, 247
 Rosetown, 23, 193
 Rosthern district, 17
 Roumanian population, 15-16
 Royal Commission on Price Spreads, 27, 29

- Royal Winter Fair, Toronto, 119
 Rural Telephone Act, 1908, 126; 1913, 127
 Russian population, 15-17
 Rust, 52; wheat-stem, 64-5
 Rye, 10, 48, 53, 54
- St. Paul, Minn., 12
 Saskatchewan Committee on Crop Insurance, 237
 Saskatchewan Co-operative Creameries, 30
 Saskatchewan Co-operative Wheat Producers (Wheat Pool), 29, 183
 Saskatchewan Field Crops Branch, Regina, 63
 Saskatchewan Government Library services, 125
 Saskatchewan Land Utilization Act, 226
 Saskatchewan Medical Assoc., 138
 Saskatchewan Municipal Hail Insurance Assoc., 65-8, 236
 Saskatchewan Provincial Debt Adjustment Board, 84
 Saskatchewan Relief Commission, 90-1, 93-5, 105, 134, 140, 170, 206-7
 Saskatchewan River, 1-2, 34
 Saskatchewan Royal Commission on Taxation, 109
 Saskatchewan Soil Survey, 8
 Saskatchewan, University of, 23, 113, 120, 226; College of Agriculture, 113; Extension Dept., 116, 119; Farm Management Dept., 76, 87, 152; Farm School, 120
 Saskatchewan Voluntary Rural Relief Committee, 93
 Saskatoon, 12-13, 15, 17, 23-4, 90, 103, 113, 117, 124, 180, 185, 193, 227; school for deaf, 147
 Saskatoon Public Library, 123
Saskatoon Star-Phoenix, 195
 Scandinavian population, 15-17, 160, 188, 190
 School Act, 111
 School Grants Act, 109
 School Trustees' Assoc., 110
 Scott, 81-2, 155, 159-60, 163, 165, 167, 177, 196-7, 248
 Searle Grain Co., 30
 Settlement, 34-8; area suited to, 1; before 1914, 34-6; lack of regulation, 37; since 1914, 36-7; *see also* Northern settlement and Railways
 Social Credit, 184
 Social welfare, 144-9, 238-41; dependent children, 146-7; maternity grants, 144; mothers' allowances, 144-6; old age pensions, 147-9
 Soil, 4-5; drifting, 221-4; fertility, 160, 220; suitability for wheat, 6, 8; texture, 9; zones, 6, 44; Deep Dark, 6, 8; Shallow Dark, 6; wooded gray, 6
 Soo Line, 12
 Souris River, 2, 230
 Standards of living, 150-68, 241
 Stores, country general, 24-5; chain, 26-7
 Swan Plains, 209
 Swift Current, 24, 42
 Swift Current Experimental Station, 228
- Taxes, 85-6, 88
 Teachers' Federation, 110
 Telephones, 126-9, 178-80, 209; rural companies: Alameda, Golden Brae, Kerrobert, Macrorie, North Forres, Pibroch, and Viscount, 180
 Tenancy, 44-7; crop-share, 45-6; partly owned, partly rented, 46-7
 Topography, 9
 Toronto Public Library, 124
 Touchwood Hills, 1
 Towns and villages, as distributing centres, 25; facilities of, 29
 Tractors, 41-3
 Trade, retail and wholesale, 24-9, 197-201
 Transition (Dark Brown) Prairie plains, 5-6; soils, 5, 8-10
 Trucks, 41-2
 Turtleford, 157, 160, 164-8, 243
- Ukrainian population, 15-17, 19
 Union Hospital Act, amendment, 1935, 142
 United Church of Canada, 186-7, 188-90
 United Farmers of Canada (Sask. section), 183, 195; lodges of, 122
- Val Maric, 230-1
 Vancouver, 74
 Voluntary Debt Adjustment, 87-8
- Water Development Committee, 230-1
 Weeds, 54, 64
 Wellington, 81-2, 155, 159-60, 162-3, 165, 197, 249
 Western Grain Co., 30

Western Producer, Saskatoon, 195

Weyburn, 23-4

Wheat, acreage, 10, 48-52, 219; carry-over, 218-19; cost of growing, 76; hazards to production, 59-69; income dependent on, 69, 71-2; influence on, settlement, 37-8, and standard of living, 150-2; soils suitable for, 6, 8; and topography, 9; varieties: Apex, 65, Garnet, 59, Marquis, 59, Red Fife, 59, Renown, 65, Reward, 59, Thatcher, 65

Wheat Pool, 125, 183-4, 195; *see also* Saskatchewan Co-operative Wheat Producers Ltd.

Wholesale Co-operative Society, 27

Winnipeg, 12, 23, 27

Winnipeg Free Press, 195

Wolseley, 174

Wooded zone, 5-6, 44; soil, 9

Wood Mountain, 1

Yorkton, 17, 24, 42, 178

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